The Dissertation Committee for Elizabeth Simpson Goins Certifies that this is the approved version of the following dissertation:

The Norwegian Success Story: Narrative Applications of Interpretation, Understanding, & Communication in Complex Organizational Systems

Committee:

Larry D. Browning, Supervisor

George Cheney

Dana Cloud

Matthew McGlone

Bud Morris

The Norwegian Success Story:
Narrative Applications of Interpretation, Understanding, & Communication in Complex Organizational Systems

by

Elizabeth Simpson Goins, B.A.; M.A.

Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

December 2013

Dedication

This dissertation is dedicated to my advisor, mentor, and friend, Larry Browning, whose unwavering support and guidance is a blessing for which I am forever grateful.

Acknowledgements

Many thanks to my committee members George Cheney, Dana Cloud, Matt McGlone, and Bud Morris, for their invaluable contributions and commitment to this project. I am also indebted to my dear friends Jan-Oddvar Sornes and Ragnhild Johnson at the University of Nordland, for supporting and guiding me through my fieldwork adventures. Thank you to my research participants for their time and interest in my work. Finally, my deepest gratitude to my parents, Dianne and Dennis Goins, who taught me that with hard work and dedication, no accomplishment is out of reach.

The Norwegian Success Story:
Narrative Applications of Interpretation, Understanding, & Communication in Complex Organizational Systems

Elizabeth Simpson Goins, Ph.D.

The University of Texas at Austin, 2013

Supervisor: Larry D. Browning

Stories about the oil and gas industry are made for drama; these are tales of unimaginable wealth, unimaginable power, and oftentimes, unimaginable deeds. But what should we make of an oil and gas narrative without a blood feud or villain? This is the story of the Norway Model, a unique system of natural resource management responsible for this country's transformation since 1969 when massive oil reserves were discovered on the North Sea continental shelf. After centuries of foreign occupation, the Norwegian government has built a thriving petroleum sector to fund its social welfare system beyond even the highest expectations; somehow, this nation of five million people grew from a poor maritime society to a global leader in environmentally conscious energy production with the largest sovereign wealth fund in the world.

Despite these results, this oil economy faces new challenges in the coming years; as North Sea production declines, Norway increasingly looks north for fossil fuels in the Arctic and how these resources are discovered, produced, and regulated will require new innovations to ensure the sustainability of this welfare state. Thus, the next chapter of the

Norwegian success story remains to be written and this dissertation explores how narratives about the past, present, and future of the Norway Model will shape the course of natural resource management policies.

In presenting the case of Norway's success from a narrative perspective, this research breaks new ground in both applied and theoretical territories. As perhaps the most successful system of its kind in the world, scholars and policy makers alike have much to learn from studying this model. But when it comes to understanding the dynamic connections between energy management, international policy, and global warming, positivistic models for prediction and causality have fallen short (Smil, 2005). In contrast, narrative can communicate nuanced meanings in complex systems of organization. Therefore, this research explores the connections between narrative and complexity, as well as the communicative applications of narrative for understanding and organizational decision-making. Overall, conceptualizing this model's evolution as a narrative offers tangible entry points for understanding how one country's story can change the world.

Table of Contents

List of Tables

List of Figures

Overview

> Our management of the petroleum resources has been a success. The objective of achieving a qualitatively better society is a good description of some of the results of our petroleum activity…Since the 1970s, the substantial revenues from the activity have helped build the Norwegian welfare society.
>
> *Norwegian Ministry of Petroleum and Energy (2011, p. 6)*

Narratives about the oil and gas industry are made for drama; these are tales of unimaginable wealth, unimaginable power, and oftentimes, unimaginable deeds. Indeed, the term "resource curse" was coined to describe the tensions between endless opportunity and pathological behaviors— poor fiscal management, social inequality, political instability, corruption, even violence—for societies with hydrocarbon-based economies (Auty, 1993; Watts, 2005). But what do we make of an oil and gas story without a blood feud or a villain? A story where the protagonist strikes it rich then uses the money to improve the lives of those around them. A protagonist who tells the truth, thinks about their actions, and realizes that more wealth or power is not always the answer. This is the story of the Norway Model.

Through a combination of foresight, regulation, innovation, and cultural values, Norwegians have thus far avoided the pitfalls of a resource-based economy. Their unique system of managing a national petroleum sector, the Norway Model,[1] is based on separate organizational structures for the commercial, political, and regulatory functions of government control (Al-Kasim, 2006a, 2006b; Thurber, Hults, & Heller, 2011;

[1] This model is also described to as "The Nordic Model" and "The Norwegian Model" and can refer to

Thurber & Istad, 2010). Since the 1960s when massive oil reserves were discovered on the North Sea continental shelf, the government has built a thriving industry to fund a national welfare system based on the principles of a social democratic political system. This approach to state-managed petroleum activity is a source of national pride, wealth, and international influence developed over fifty years of practice that continues to exceed expectations.

Figure 1 (NPD, 2012) illustrates the developed regions of Norway's continental shelf in the North, Norwegian, and Barents Seas. With these combined resources, these developments made Norway the seventh-largest oil exporter and fourteenth-largest oil producer in the world in 2012. Corresponding revenues translated to over four trillion NOK ($729 billion USD) in the Norwegian sovereign wealth fund, currently the largest of its kind in the world (NPD, 2012). Today, Norwegians are some of the healthiest, wealthiest, and happiest people on the planet; the country has topped the United Nations annual Human Development Index nearly every year for the past decade. Despite these phenomenal results, the future of Norway's oil economy faces new challenges in the coming years.

North Sea oil production reached a plateau in 1995, a peak in 2001, and a decline in 2009 (MPE, 2010). Until recent years, petroleum activity has been contained to the southern and western regions of the continental shelf, but along with the rest of the world, Norway increasingly looks north in search of fossil fuel energy. Thus, the ways that Norway discovers, produces, and regulates petroleum will experience major transitions and require new innovations in the coming years.

Figure 1. *Developed Regions of the Norwegian Continental Shelf*

Keeping the Success Story Going

Overall, the government stresses that continuing to find undiscovered resources in Arctic, as well as making the gradual transition from focusing on oil to gas production, is vital to maintaining Norway's vision for the future. As illustrated by Figure 2, the most

recent U.S. Geological Survey predicts that 13 percent of the world's undiscovered oil and 30 percent of undiscovered natural gas resources are contained in the Arctic (U.S. Energy Information Administration, 2012). For Norway, almost all of these resources are located in the Barents Sea, regions collectively referred to as the High North, including recently delimitated territories between Norway and Russia.

Figure 2. *Resource Basins in the Arctic Circle*

After forty years of dispute, in April 2010, the countries finally agreed on maritime boundaries for oil and gas activity and this accord has been symbolic for Norwegian policymakers staking their future plans on the Arctic. However, the

challenges of harsh weather, darkness, and rich ecological diversity in the Barents Sea liken these regions to a Wild West for petroleum development—unchartered and unpredictable. In addition, the High North includes the island regions of Lofoten and Vesterålen (LoVe), areas steeped in cultural and environmental significance (see Figure 3). As spawning grounds for the world's largest cod and herring populations, LoVe is known for breathtaking beauty and a historic fishing industry, making it a popular tourist destination for Norwegians and world travelers alike.

Figure 3. *Lofoten Islands Region*

Over the last decade, opening these regions to petroleum activity has been a topic of public and political controversy. Many argue that stopping LoVe drilling symbolizes a larger international movement towards sustainable industries and energy resources in a climate change era. Thus, the next chapter of the Norwegian success story remains to be

written and this dissertation explores how narratives about the past, present, and future of the Norway Model will shape the course of resource management planning.

Why Narrative?

Narrative logic is evident in some of the most culturally symbolic aspects of the Norwegian petroleum sector. For example, the Norwegian Ministry of Petroleum and Energy (2011) explains, "the names of many [oil and gas] fields are taken from Norse mythology, with strong roots and steeped in national tradition" (p. 7). However, now that "the strongest names from Norse mythology are already in use" the Ministry believes that Norway "should also consider new types of names…to reflect the industry's importance, both for specific regions and for the nation as a whole…to ensure that they fit into a national context and history" (p. 7). What remains uncertain—how the Norwegian success story will continue as a national history—is how the Norway Model will adapt to interdependent and emergent challenges such as globalization and climate change.

When it comes to studying and understanding the dynamic connections between energy management, international policy, and global warming, positivistic models for prediction and causality have fallen short (Smil, 2005). In contrast, narrative thinking can capture nuanced meanings in complex systems of organization, but is vastly underutilized in social science research about these topics. Therefore, to develop the theoretical implications of conceptualizing the Norway Model, this research explores the connections between narrative and complexity, as well as the communicative applications of narrative for understanding and organizational decision-making. The following chapters explore how studying the Norway Model from a narrative perspective can shed

new light on the overwhelmingly complex global issue of energy security. Overall, I argue that conceptualizing this Model's evolution as a narrative offers scholars and policy-makers in both Norway and beyond a tangible framework for understanding how one country has been successful where so many others have failed.

Chapter One provides a theoretical framework for interpreting individual and organizational narratives about the Norwegian success story. Through the lens of five metaphors of organizational narratology, this chapter argues the structural and functional aspects of narrative are ideal for conceptualizing and communicating about complexity in organizational settings. Next, Chapter Two describes the hybrid inductive methodology—a combination of interpretive, narratological, and case study methods—that guided my research process. The results of this research are presented in the next two chapters from different narrative perspectives.

Chapter Three offers a temporal framework for understanding the Norwegian success story by locating the Norway Model in a larger cultural-historical context of natural resource management. Overall, "The Ten Oil Commandments" explains the Norway Model as one of cultural values enacted through an innovative combination of organizational structures and adaptations for long-term success. The metanarrative of this success story is juxtaposed against a different temporal perspective in Chapter Four. With the future of Arctic petroleum development uncertain, the local stories from organizational leaders in "A New Chapter for the North" interpret a different ending. These narratives communicate that Norway must starts building a more sustainable

national industry now; with the inevitable end of fossil fuel energy, in twenty or thirty years, it will be too late.

Furthermore, the stories in Chapter Four question whether the proposed petroleum activity in LoVe represents a cultural and moral tipping point for Norway. Moving forward with exploration and drilling could disrupt local ways of life, damage rich and diverse ecosystems, and endanger the lives of offshore workers. In the process, these interpretations reveal fascinating tensions between the historical and political traditions of the Norwegian people, how they have managed natural resources for two hundred years, and how newfound wealth has affected this country. Taken together, Chapters Three and Four identify how on both individual and institutional levels, narrative is applied to understand the meaning of events and communicate how that meaning influences decision-making and action.

Within this broad scope of narrative applications, Chapter Five examines the role of circumspection in the Norwegian success story. Circumspection deals with the cognitive process of reflecting on past events to understand how to best plan for the future. Circumspection also can be described as prudence, or careful and thoughtful planning, a term frequently used to the policy-making strategies of Norwegian resource management. Whether the story is about environmental protection, foreign relations, investment strategy, or social welfare, the punch line is the same: the Norway Model is organized by a complex system of careful and considerate policies designed to balance the risks and rewards of petroleum activity over time. By examining the evolution of these policies through the lens of organizational narratology, this dissertation offers both

scholars and decision-makers valuable understanding on the future of energy management in a globalized world.

Chapter One: Theoretical Framework

In choosing a narrative approach for this project, I follow a strong tradition of scholars studying complex forms of communication in complex forms of organizations. With roots in literary criticism, organizational narratology focuses on using narrative theory to study "what we gain from using [stories] as a vehicle for communication" (Browning, 2009, p. 673). In its simplest form, scholars such as Czarniawska (1998), Putnam and Fairhurst (2001), and Weick (1979) would describe narrative as "a type of communication that happens in conversation, is composed of discourse, appears in a sequence, and is interpreted retrospectively" (Browning & Boudes, 2005, p. 32). Czarniawska (1998) argues the most basic form of narrative "requires at least three elements: an original state of affairs, an action or an event, and the consequent state of affairs" (p. 2). This broad scope of analytic criteria involves the form, style, and purpose of organizational stories and can be applied to any number of organizational texts such as annual reports, conversations, interviews, mission statements, and technical documents.

Within organizational communication research, narratology can be conceptualized from many different ontological and epistemological positions. Thus, this chapter outlines a theoretical framework that situates my research within organizational and communication studies, provides useful concepts and structures for interpreting narratological research, and makes epistemological and ontological assumptions about the value and application of narratives in this research. First, the *open architecture metaphor* explains the how different types of stories can be applied for different communicative functions. Second, the *narrative mode thought metaphor* offers a

structural framework for analyzing how stories can provide the type of nuanced cognitive understanding that is often lacking in more positivistic or scientific reasoning. Third, the *sensemaking metaphor* explains how narrative communication reflexively produces meaning and action. Fourth, the *Tamara metaphor* offers a postmodern perspective on interpreting multiple voices, contexts, and meanings in organizational stories. Finally, the *homo narrans metaphor* positions narrative as a useful structure for social and cognitive understanding, but more importantly, as the primary component of human communication.

These five metaphors illustrate those positions I draw upon to inform this dissertation and locate my research in the broader context of the discipline. In addition, each of these sections also includes the relevant research questions that guided my interpretive process. While collecting and making sense of this data, these questions emerged as I dove deeper into the organizational narratology research.

Open Architecture Metaphor

Although there is no singular definition of what "counts" as a narrative, some would argue that stories are distinct from narratives (e.g., Gabriel, 1995, 2004). If story is a real-time account of something that happened, then narrative is the retrospective interpretation of what that story means in a larger context (Boje, 2001). An eyewitness account of a factory burning to the ground is a story; a newscaster's telling of shoddy factory safety inspection records and the aftermath for workers and their families is a narrative. Yet, relegating story form to something "less-than" a narrative implies

limitations on the communicative and cognitive capabilities of both storytellers and story-readers.

Bruner (1986) explains that "placing limits on the kinds of stories…could mean either that the limits are inherent in the minds of writers and/or readers (what one is able to tell or to understand)…[thus] we would do well with as loose fitting a constraint as we can manage concerning what a story must 'be' to be a story" (pp. 16-17). The argument for a "loose fitting restraint" on what "counts" as a story or narrative, as well as the approaches we take towards studying and understanding them, is echoed by Browning and Morris (2012) who propose an *open architecture metaphor* for organizational narratology.

This open architecture is grounded in narrative appreciation, a concept "analogous to music appreciation in that it brings theoretical concepts from narratology to bear on how people experience and assess stories" (Browning & Morris, 2012, p. 2). In terms of communication, narrative appreciation means applying theoretical ideas about the form, structure, content, and application of narratives to interpret how individuals understand and find meaning through stories. Like Bruner, Browning, and Morris, I agree that distinguishing between narrative and story offers limited heuristic value, and thus use the terms interchangeably.

However, I also agree with scholars such as Boje (2001) that not all texts are stories; some stories are too fragmented to communicate developed meaning. Still, as Bruner (1986) argues, "narrative deals with the vicissitudes of human intentions. And since there are myriad intentions and endless ways for them to run into trouble—or so it

would seem—there should be endless kinds of stories" (Bruner, 1986, p. 16). What this means, "in English," according to McAdams (2006), is "that stories are about what characters want, what they intend to do, and how they go about trying to get what they want or avoid what they do not want, over time" (pp. 77-78). Thus, narrative appreciation is a useful tool for studying the complex intentions, actions, and motivations involved with organizational narratives.

Specifically, Browning and Morris (2012) argue that narratives have many different communicative applications.

Table 1. *Communicative Applications of Narrative*

Application	Definition
Explanation	Goes from partial understanding of a set of events toward a fuller interpretation that reveals more precisely what happened and why (p. 13).
Imagination	Placing a set of circumstances and people in a different space and time continuum via a story and hypothesizing about them to construct an idea of what might have been, or what will be (p. 13).
Celebration	Calls attention to the qualities possessed by the actor and to the possibility of reauthoring the self by characterizing them in favorable way (p. 15).
Transportation	How a story moves, or transports, a listener or reader by its sheer power…that they lose awareness of their current setting, are shocked when they "come out of it," and are affected…by the story to such an extent that they are changed by it (p. 14).
Circumspection	Reflecting upon what happened in the past, altering understandings about the circumstances of actions, and prudently anticipating future events (p. 15).
Elevation	Shifts the audience from a dulled to a thrilled attentiveness and from a base to an elevated horizon of possibilities (p. 16).

Table 1 illustrates the six applications Browning and Morris propose. Because of their familiar form, aesthetic appeal, and cultural significance, narratives are useful for communicating about complex topics such as identity, morality, and rationality. In organizational narratives, we see elements of learning, argumentation, and decision-making in these communicative applications. In keeping with the open architecture for studying these applications, though, it is important to remember this list is not exhaustive. Instead, this list should be considered as an invitation to other scholars examining the communicative forms and functions of narratives in organizational research.

For example, Czarniawska (1998) describes four common narrative forms in organizational research: "research that is written in storylike fashion ('tales from the field,' to paraphrase Van Maanen, 1988)…that collects organizational stories (tales of the field)…that conceptualizes organizational life as story making and organizational theory as story reading (interpretive approaches); and a disciplinary reflection that takes the form of literary critique" (pp. 13-14). These classifications are useful in understanding how I have presented the results of this dissertation and layers of story within them, which will be explained in Chapter Three. Furthermore, in terms of the content and structure of this dissertation, the open architecture metaphor guided my analysis and interpretations in answering the following research question:

> RQ1: What types of organizational stories and communicative applications of narrative are present in the High North?

Narrative Mode Thought Metaphor

Much of the narratological work by contemporary organizational scholars is influenced by psychologist Jerome Bruner, who claims that narrative are their own form of human knowledge. Bruner (1986) introduces the *narrative thought metaphor* as an alternative to what he calls logico-scientific thinking: "there are two modes of cognitive functioning, two modes of thought, each providing distinctive ways of ordering experience, of constructing reality. The two (though complementary) are irreducible to one another" (p. 11). Tsoukas and Hatch (2001, p. 983) summarize how Bruner compares these two modes of thought in Table 2. This figure illustrates the different objectives, methods, and characteristics of logico-scientific and narrative mode thought grounded in what Bruner describes as the difference between sound arguments and good stories (Tsoukas & Hatch, 2001; Weick & Browning, 1986). For example, a sound argument is motivated by objective truth, but a good story is motivated on plausibility, or verisimilitude. What matters is whether or not that story is believable, not whether or not it is fictional.

Furthermore, comparing these two thought modes reveals that "whereas in logico-scientific thinking, propositions or rules connect categories of behavior of actors and situations, narrative thinking places these elements into a sequenced, contextualized statement with a plot" (Tsoukas & Hatch, 2001, p. 998). Events themselves are not a narrative; when placed in a temporal context, or a plot, events may be interpreted with causality and thus, become meaningful. This sequencing creates an identifiable schema for locating and remembering people and places, identifying the nuanced connections

between motivation and outcome, and constructing tangible understandings from fluid experiences.

Table 2. *Comparison of Bruner's Two Modes of Thought*

	Logico-scientific mode	*Narrative mode*
Objective	Truth	Verisimilitude
Central problem	To know truth	To endow experience with meaning
Strategy	Empirical discovery guided by reasoned hypothesis	Universal understanding grounded in personal experience
Method	Sound argument	Good story
	Tight analysis	Inspiring account
	Reason	Association
	Aristotelian logic	Aesthetics
	Proof	Intuition
Key characteristics	Top-down	Bottom-up
	Theory driven	Meaning centered
	Categorical	Experiential
	General	Particular
	Abstract	Concrete
	De-contextualized	Context sensitive
	Ahistorical	Historical
	Non-contradictory	Contradictory
	Consistent	Paradoxical, ironic

Source: Bruner (1986: 11–43).

Two scholars, American psychologist Donald Polkinghorne and French philosopher Paul Ricœur, are especially relevant in understanding how temporality and plot are intertwined in Bruner's conception of narrative thought. Polkinghorne (1991) defines narrative as "the cognitive process that gives meaning to temporal events by identifying them as parts of a plot" (p. 136). Let us unpack that definition: narrative is a

cognitive process; temporal events are experiences with a beginning, middle, and end; a plot is a sequence of events; and locating temporal events within this sequence makes them meaningful. Events are the parts, and plot is the whole, of a narrative (Polkinghorne, 1988). This part-whole structure, or narrative configuration, provides a heuristic framework for organizing experiences with coherence (Polkinghorne, 1988, 1991). That is, narrative configuration allows us to recognize when an event is starting, in process, or completed. The process by which narratives are configured is what Ricœur (1984, 1985) describes as emplotment.

Carr (2008) explains that for Ricœur, "narrative is an essential feature of human existence by which we humanize and thus deal with time. It gives our individual and social existence sensible contours and projects, and thus gives meaning to life" (p. 27). Placing events in a larger context and sequence creates individual and collective meaning and memories. Similarly, Boje (2001, p. 43) compares synchronic narratives as "stories about a specific society at one time in history" to diachronic narratives, which take on "historical change, discontinuities, and ruptures (Best & Kellner, 1991, p. 172)." Organizational narratives dealing with societies and cultures, historical contexts, and specific events can be synchronic, diachronic, or have elements of both.

In this dissertation, the narrative mode thought metaphor provides important structural features for analyzing and comparing the different stories about the timeline and trajectory of Norwegian resource management through exploration of the following research question:

RQ2: What are the major plotlines and temporal contexts of the organizational stories in this data?

Sensemaking Metaphor

Similarly to the narrative mode thought metaphor, from an ontological perspective, the *sensemaking metaphor* assumes that communication and knowing are intrinsically connected. This metaphor is based on the work of psychologist Karl Weick who explains that as a process of organizing, sensemaking involves the retrospective creation of identification and meaning. When faced with decisions for action in complex environments, organizations must engage in a process of dually producing and enacting situational contexts to decide what information to use (or not) and how to use it (Cheney, Zorn, & Ganesh, 2011). In other words, organizations must find ways to make sense of their environments by looking back on what is known about the past to move forward. As organizations make sense of their environments, they create stories about events not only to articulate meaning; stories can actually establish events as meaningful.

As Browning and Morris (2012) explain, "a distinctive feature of sensemaking, and one that also distinguishes it from interpretation, is the way action and organization collaborate to make up the structure. Weick sees communication as a type of action because generating discourse is an act of performance and production" (p. 141). The act of communicating this discourse in narrative form takes meaning from being individual to organizational, from interpretation to action. If storytelling articulates the "quest" of an organization, then future actions are evaluated and decided based on coherence with

this journey (Czarniawska & Wolff, 1998). This sensemaking process is always ongoing and it is always retrospective.

However, sensemaking is not just collective. From a cognitive perspective, "sensemaking is an effort to tie beliefs and actions more closely together…the outcome of such a process is a unit of meaning, two connected elements" (Weick, 1995, p. 135). McAdams (2006) argues "when it comes to human lives, storytelling is sensemaking. I cannot understand who you are and what your life might mean unless I have some sense of the story you are working on—the way you see your life as a plot enacted over time" (p. 76). This understanding is not only about one person understanding another, McAdams continues; "we expect stories to tell us who we are" (p. 76). In other words, we think about life events in story form to also make sense of our individual identities and what that means for future decisions. This meaning is essential for understanding the common events in organizational life when individual actors encounter something they don't understand and ask "what's the story here?" (Weick, et al., 2005, p. 410). In asking for the story, the explanation, individuals have potentially created a reference point for meaning.

David Boje's work on sensemaking is also important for understanding the meanings and actions that organizational communication in narrative form can produce. For example, Boje (1991) argues that telling stories offers organizational actors valuable "sense-making currency" for building stakeholder relationships (p. 106). As Boyce (1996) explains, Boje illustrates that "skilled storytellers and story interpreters are effective organizational communicators, demonstrate understanding of organizational

culture and history, and possess skills that managers dealing with rapid change might well develop" (p. 18). Furthermore, "Boje's work draws attention to the uses of storytelling by internal stakeholders (predicting, empowering, and fashioning change) and by external stakeholders (making sense of the setting, negotiating alternative interpretations, and accommodating new precedents " (Boyce, 2006, p. 18). Overall, "the sensemaker can build on the main nugget of the story to communicate a stronger grasp of the concept" (Browning & Morris, 2012, p. 13). Having this ability—to communicate the central "take-away" within a story in a way that also communicates a broader scope of meaning—provides organizations and organizational actors considerable advantage in managing their interests in fluid, complex environments.

This metaphor is useful for researchers in examining how organizations and individual organizational actors use stories to interpret events, as well as how these stories can communicate meaning between internal and external stakeholders. Overall, sensemaking is about putting collective and individual identity into action by communicating. Thus, the following research question will deal with sensemaking:

RQ3: How do the organizational stories about resource management policies reflect elements of collective and individual identity?

Tamara Metaphor

Building on Weick and arguing a postmodern turn for organizational studies, Boje (1995) applies the *Tamara metaphor* to understanding what he describes as the "plurivocal interpretation of organizational stories in a distributed and historically contextualized meaning network" (p. 1000). Based on the Los Angeles play for which it

was named, this metaphor is a "wandering linguistic framework in which stories are the medium of interpretive exchange" in organizations (p. 1000). In *Tamara*, "a dozen characters unfold their stories before a walking, sometimes running audience" who can "chase characters from one room to the next…and cocreate the stories that interest them most" (Boje, 1995, pp. 998-999). With twelve stages and twelve characters, "the number of story lines an audience could trace as it chases the wandering discourses of *Tamara* is 12 factorial (479,001,600)" (Boje, 1995, p. 999). These story lines are akin to the multiple performances, types, narrators, and interpreters, in storytelling organizations.

This metaphor and the concept of plurivocality extends Boje's (1991) previous work defining a storytelling organization as "collective storytelling system in which the performance of stories is a key part of members' sense-making and means to allow them to supplement individual memories with institutional memories" (p. 106). Although storytelling does give "narrative order" to "chaotic experience," Boje (2001) argues "sensemaking is not all there is" (p. 7). Sometimes, "experiences lack that linear sequence and are difficult to tell as a 'coherent' story," and "telling stories that lack coherence is contrary to modernity" (p. 7). When encountering stories that lack coherence, we question the plausibility of how, when, and why these events occurred as they are narrated; we think to ourselves, "something doesn't add up here."

However, Boje (2001) would argue these criteria for assessing the plausibility of stories is flawed; "in the postmodern condition, stories are harder to tell because experience itself is so fragmented and full of chaos that fixing meaning or imagining coherence is fictive" (p. 7). In reality, "storytelling is not actually linear or coherent, and

stories in organizations are emergent, fluid, and polyvocal" (Boje, 2001, p. 1). Organizations and organizational actors must dually interpret and enact meaning in the "indeterminate" and "differentiated events of daily life (Boje, 1995, p. 1001). Thus, organizational storytelling is grounded in managing the temporal aspects of learning and decision-making with the structural functions of narrative.

Like sensemaking, the Tamara metaphor also has collective and individual implications. Storytelling organizations "exist to tell [and] live out their collective stories," and are "in constant struggle over getting the stories of insiders and outsiders straight" (Boje, 1995, p. 1000). However, an organization is not one story with one interpretation, and such struggle can also occur *between* insiders. Since an organization—and even the nature of organizing—is fluid, distributed, and emergent, the meaning of events communicated via narratives "depends upon the locality, the prior sequence of stories, and the transformation of characters in the wandering discourse" (p. 1000). Furthermore, organizational stories are co-constructed by both narrators and the listeners or readers. Thus, the potential for multiple individual and organizational interpretations cannot be ignored.

In such a complex organizational environment as national resource management, multiple interpretations of storied events also cannot be ignored. Thus, the Tamara metaphor is used to frame the following research question:

RQ4: What are the different interpretations of these organizational stories and how do they compare to one another?

Homo Narrans Metaphor

Similar to other narratologists, Walter Fisher focuses on the role stories play in constructing collective and individual meaning. However, Fisher (1987) departs from the pack with *Human communication as narration: Toward a philosophy of reason, value, and action* and the concept of a narrative paradigm. Instead of viewing narrative as simply a communicative vehicle for social understanding or cognitive processing, Fisher argues with the *homo narrans metaphor* that narrative subsumes all other frameworks of rationality, truth, and knowledge as the primary form of human communication.

"Like any other theory of human action," the narrative paradigm seeks "to account for how persons come to believe and behave" (Fisher, 1987, p. 97). However, this metaphor "is a fabric woven of threads of thought from both the social sciences and the humanities" to project "narration not as an art, genre, or activity, but as paradigmatic of human discourse" (p. 97). According to homo narrans, the narrative paradigm supersedes dominant metaphors such as ideology and hegemony because they are concepts that illustrate reason and value, expressed through the narrative discourse of communication.

This paradigm is based on "a philosophy of reason, value, and action" rooted in a logic of "narrative rationality" (Fisher, 1987, p. 47). Narrative rationality deals with "the reliability, trustworthiness, and desirability" of communicative discourse (p. 143). More specifically, these aspects of discourse are evaluated for narrative rationality based on coherence and fidelity. The probability of a narrative, if it is cohesive and believable, is determined by argumentative/structural, material, and characterological coherence. This

third type of coherence is "one of the key differences between the concept of narrative rationality and traditional logics" because "whether a story is believable depends on the reliability of its characters" (p. 47). The way to determine reliability of character is whether or not "interpretations of the person's decisions and actions reflect values," and whether or not these "organized sets of actional tendencies" illustrate contradictions or anomalies (p. 47). In other words, whether or not a character lives up to their story.

Whereas coherence deals with plausibility, another aspect of narrative rationality, fidelity, relies on a logic of "good reasons" based upon "elements that provide warrants for accepting or adhering fostered by any form of communication" (Fisher, 1987, p. 48). Accordingly, this logic can be used to assess the fidelity—the truthfulness—of a story and thus, what that story is asking us to believe. Fisher argues that narrative fidelity can be assessed by asking "critical questions that can locate and weigh values...about fact, relevance, consequences, consistency, and transcendental issues" (p. 48). Furthermore, considering coherence and fidelity together is particularly useful for assessing narratives dealing with what Fisher describes as "public moral argument" (p. 71). Within this broader description are three important criteria for applying the narrative paradigm to organizational stories.

First, *public* moral argument is publicized for broad consumption; it crosses professional fields (although different professional experts will usually participate in the argument and the perceived rationality of their arguments influences the public's judgment) and "is often undermined by the 'truth' that prevails at the moment" (Fisher, 1987, p. 71). Second, public *moral* argument is "founded on ultimate questions—of life

and death, of how persons should be defined and treated, of preferred patterns of living" (pp. 71-72). Third, public moral *argument* relies on "good reasons, according to the narrative paradigm, and "may also refer to public controversies—disputes and debates—about moral issues" (p. 72). These nuanced descriptions underscore how as the primary form of human communication, narrative plays out into the public sphere to influence our reasons, values, and actions.

As such, the core concepts of Fisher's homo narrans metaphor, guided by a fifth and final research question, offer another useful framework for interpreting the narrative data in this dissertation:

RQ5: How are narrative coherence and fidelity communicated through these organizational stories?

Chapter Summary

Taken together, these five metaphors represent the various epistemological and ontological positions from organizational narratology that guide my interpretations, frame the way results are presented, and illustrate where this research makes unique contributions to organizational and communication studies. Using these metaphors, I locate elements of temporality, context, culture, and action within the stories I collected during fieldwork. From there, I construct the narratives results chapters of this dissertation. Chapter Three, "The Ten Oil Commandments," will examine the Norwegian oil and gas success story from the perspective of government organizations as told through the lens of public policies. Chapter Four, "A New Chapter for the North," digs deeper into the plurivocal narrative of Norway's next steps in Arctic petroleum

development and what those steps will mean for Norwegians on local, national, and global levels.

Chapter Three: A Hybrid Inductive Methodology

> Like a camera with many lenses, first you view a broad sweep of the landscape. Subsequently, you change your lens several times to bring scenes closer and closer into view.
>
> *Charmaz (2006, p. 14)*

The present study was conducted using a number of inductive methods often found in qualitative organizational communication research. Researchers employing inductive methods are often challenged by the positivist assumption that an initial lack of specificity in theoretical backing, units of analysis, and predictive hypotheses equates with lack of focus. Yet the goals of inductive research are to generate new conceptions of "the daily realities (what is actually going on)" of social phenomena, rather than simply verifying existing theoretical constructs (Glaser & Strauss, 1967, p. 238). As Patton (1980) explains, "inductive analysis means that the patterns, themes, and categories of analysis come from the data; they emerge out of the data rather than being imposed upon them prior to data collection and analysis" (p. 306). Essentially, working backwards through this emergent process is a pain-staking task.

This chapter includes sections on interpretive, narratological, and case study methods that guided the inductive process of my dissertation research. The project began with a social phenomenon to study—the Norway Model of natural resource management—and from there, the patterns, themes, and categories of communicative realities in the data shaped methodological decisions and theoretical directions. In addition, this inductive process pushed me to seek out *best* methods for answering my

specific questions as they emerged. As such, methods from other social science traditions such as public policy, sociology, and management make this research uniquely interdisciplinary. The following sections will outline the specific elements of those traditions that shaped data collection, analysis, and reporting, as well as the measures I employed for ensuring reliability and validity throughout this research.

Interpretive Methods

Originally, this dissertation was conceived as part of a larger book project on communication and culture in northern Norway. My assignment was spending three months at the University of Nordland (UiN) Bodø Graduate School of Business (HHB) examining the political and cultural implications of petroleum development in these regions and when I entered the field, I had much to learn about Norway. In terms of the theoretical directions of this research, I also had much to learn about the implications of the Norway Model for organizational communication. During my first interview with Ivar Kristiansen, a member of Parliament from Nordland county, he mentioned that Norway has "accepted foreign companies since the start of this fairytale." At the time, I did not realize his comment would so heavily influence the way this project would develop, but the narrative seed had been planted.

Before reviewing this narrative focus though, I will explain the interpretive methods I used from the start of this research process. Interpretive researchers are primarily concerned with "the human as instrument" approach (Lincoln & Guba, 1985). The interpretive approach to examining social science phenomena respects individual experiences in daily life, necessitating that researchers shape theoretical understandings

from the actions, beliefs, and perspectives of their participants. Within the broader scope of interpretivism, this section reviews how I collected and analyzed data using elements of ethnographic and grounded theory methodologies.

Fieldwork

The term *fieldwork* generally refers to the activities researchers perform at the physical site of a cultural group (e.g. listening, observing, conversing, recording, interpreting) and is especially useful when dealing with larger issues of ethics, culture, and politics (Wolcott, 1995). In an ethnographic context, fieldwork "requires one to spend time engaged in a setting, taking part in the daily activities of the people under study and recording, as soon as possible, observed activities in the form of fieldnotes" (Jackson, Drummond, & Samara, 2007). In organizational studies, these observations and notes can be incorporated with other forms of data (e.g., interviews, archival records) for interpretive analysis.

In this study, the field sites for my work consisted of organizations throughout Norway, but were mainly concentrated in northern Norway— Bodø, Lofoten, and Harstad—and Oslo. Most of my time in the field was spent recruiting respondents by attending networking functions such as conferences for industry and political representatives, visiting organizations to conduct interviews, and working at the university. In addition to collecting interview and archival data, I learned a great deal about the cultural aspects of Norwegian resource management by observing the rituals, conversations, and practices taking place around me at these organizations. I took detailed fieldnotes about these observations as a cultural and professional outsider.

Figure 4*: Fieldwork Cities in Norway*

Figure 4 provides a geographic context for these regions (National Geographic, 2012). For example, I spent one weekend attending an anti-petroleum protest in Svolvær, a historic fishing village in the Lofoten Island region. Several high-profile politicians and NGO leaders would be speaking at debate and had agreed let me interview them at various times throughout the weekend. The rest of my fieldwork trip was spent talking to protesters at the local pub, hearing their arguments against Northern petroleum activity over a piping bowl of *fiskesuppe* (creamy fish soup) and a pint. (Figure 5 is taken from my photos of the trip.) I also wandered amongst the *rorbus* (traditional fishing cabins often converted to vacation rentals) and *hjell* (wooden racks for drying cod in the winter) getting a sense of what life was—and still is—for these Northern communities.

Figure 5. *Rorbus in Lofoten*

In Oslo, I saw Norwegian life below the Arctic Circle, its sushi restaurants and crowded trams a cosmopolitan contrast to the pastoral symbolism of Lofoten. As home to the Storting (Parliament), Norwegian bureaucratic headquarters, and international NGO regional offices, Oslo was where most political decisions about Norway's oil and gas future were being made. This is a sticking point for many Northerners who oppose petroleum activity in their hometowns; they feel disconnected and underrepresented, questioning whether the rest of Norway should reap most of the benefits of their labor and resources. Northerners are stereotyped as rural, simple people, but they sometimes view Southerners as exploitive and arrogant. Spending time in these vastly different regions, observing and recording how nuanced cultural issues such as the North/South tension affect petroleum development, provided me with additional data and invaluable perspectives for interpretation.

In addition, my role as a cultural outsider revealed how central my own identity was to the interpretive process. Czarniawska (1998) describes fieldwork as "a situation in which a person leaves his or her own field and more or less established identity to enter another field" (p. 42). This entrance "begins with extensive positioning," something I certainly experienced at different stages of my fieldwork and recorded in my notes (Czarniawska, 1998, p. 42). To recruit participants, I learned to position myself as a curious and politically neutral American graduate student; higher education and global citizenship are strong cultural values in Norway. During interviews, respondents often asked questions about my personal background, coursework and studies, future career plans, and perspectives on their system as an American.

At first, such positioning felt disingenuous, but over time, I realized my discomfort was an asset. As Czarniawska (1998) explains, when you no longer identify as an outsider, perhaps "it will be time to go home: the feeling of estrangement is gone and with it the main source of insight" (p. 41). For certain, each time I returned to Norway to collect data and work at the university, I felt more like an organizational and cultural insider. In turn, my observations reflected more expertise and I had to remain cognizant of how of this shifting identity could influence my interpretations.

Semi-structured Interviewing

As another part of fieldwork, semi-structured interviewing that begins with standard questions, and then allows researchers to deviate from the schedule based on how a conversation unfolds, provides the most flexibility and responsiveness to emergent themes (Charmaz, 2006; Jackson, et al., 2007). My interview protocol thus took shape in the form of both standard questions and exploratory probes designed to elicit different responses from different participants (see Appendix A). Each interview always began with "how would you define the High North?" and ended with "based on our discussions, is there anything you think I am missing?" These questions were meant to provide some consistent points of comparison during data analysis. Between those opening and closing inquiries, I selected questions from a list of different topics relevant to each interviewee's area of expertise with petroleum activity. Upon request, I emailed participants an interview schedule before our meeting.

Consistent with the constant comparative method of analysis discussed later in this chapter, my interviewing strategies and questions adapted as theoretical directions

became clearer. Overall, I completed 24 semi-structured, in-depth interviews (23 face-to-face and one via telephone) with elected officials, NGO leaders, policy analysts, and researchers from a variety of organizations involved with the political, regulatory, and environmental aspects of the national petroleum sector (see Appendix B for a list of participants and their affiliated organizations; see Appendix C for descriptions of the organizations represented in interview and archival data). These efforts resulted in approximately 17 hours of recording and 296 single-spaced pages of transcribed data uploaded into Nvivo software for analysis. All but one participant consented to interview recording and use of their actual names and organizations during analysis and reporting. The participant who declined allowed me to take notes during the interview and report their responses using a pseudonym. These sampling, interview, and consent procedures were approved by The University of Texas at Austin Institutional Review Board and Norwegian Social Science Data Services.

Theoretical Sampling

To recruit interview participants, I employed theoretical sampling, a foundational aspect of grounded theory methodology. Grounded theorists sample based on emergent directions of theoretical development, rather than using the logic of selecting participants to confirm hypotheses and create generalizable theory (Glaser & Strauss, 1967; Corbin & Strauss, 1990; Strauss & Corbin, 1990, 1998). Because it begins with a broad scope of potential experiences and narrows with greater understanding, theoretical sampling ensures representativeness and consistency of theory development (Corbin & Strauss, 1990; Strauss & Corbin, 1990, 1998).

Researchers must also weigh the benefits of wide and narrow sampling (Cutcliffe, 2000) and in line with Lincoln and Guba (1985), I approached my first round of interviews—from May to August 2010—with the belief that wide sampling would offer more varied data in terms of experiences, situational factors, and interpretations. In addition, Glaser and Strauss (1967) advocate that participants should be selected for both similarity and difference. I articulated my wide initial sample as organizational actors involved in current public policy debates about petroleum development in northern Norway and narrowed that criteria based on constant comparative analysis.

Potential participants were initially recruited through my personal contacts at Bodø Graduate School of Business. As a prominent research facility for Arctic energy issues, faculty members at HHB have an extensive network of organizational contacts with relevant expertise for this project. After a faculty member introduced me to potential participants via email, face-to-face or telephone meetings, I followed up with each recruit to set up a formal interview. I also looked up various administrators within the Norwegian ministries pertinent to my topic and "cold" contacted them via telephone or email in hopes of scheduling an interview. As my fieldwork continued, I relied on suggestions for future informants and introductions from interview respondents.

For example, Frederic Hauge (president of Bellona Foundation) advised me to contact Gaute Wahl (president of People's Action Oil-free Lofoten, Vesterålen and Senja). Mr. Wahl invited me to Lofoten for the previously mentioned weekend anti-drilling protest sponsored by his organization. During that weekend, I was able to interview the leaders of two national political parties who were participating in a festival

debate about northern oil drilling. One of these party leaders I cold contacted via email from her party website; the other agreed to meet with me after an administrator at HHB put in a call on my behalf. And just as my interview protocol became more refined with more time in the field, my sampling strategy narrowed as theoretical directions became clearer. For example, during my third data-collection trip in May 2011, I focused on recruiting participants with direct involvement in the upcoming municipal elections, since Northern oil drilling was one of the issues being debated among candidates.

Archival Data Selection

In addition to collecting observations and interview data, part of my fieldwork relied on learning as much as I could about Norwegian petroleum activity as soon as possible. I had to be sensitized to the jargon, organizational structures, current events, and main actors involved in this aspect of the petroleum sector to conduct productive interviews. For example, when a participant mentioned "the 4% rule," I learned they were referencing Norway's sovereign wealth fund and the related controversies about how much of the government's annual budget should come from those savings. Most of this knowledge came from reading white papers and other organizational documents that interview participants either gave or directed me towards, such as a strategic report on Arctic foreign policy from the Ministry of Foreign Affairs. I also gathered a multitude of online annual reports, policy papers, histories, and news articles to prepare for interviews.

With more time in the field, I realized these documents were not just helpful preparation materials; they were valuable data. Thus, I continued collecting and began analyzing them in the same fashion as interview transcripts. In fact, Chapter Three of this

dissertation is primarily based on my interpretations of the stories in this archival data. I continued this analytic process continued until I reached theoretical saturation (Glaser & Strauss, 1967) as described in the following section. Overall, 39 of these documents are interpreted in this dissertation (see Appendix D and the list of references).

Constant Comparative Analysis

The constant comparative method of analysis involves concurrently gathering and coding data, letting emergent concepts guide directions for theoretical development (Glaser & Strauss, 1967). According to Corbin and Strauss (1990), the basic units of analysis in this method are concepts, or the "the incidents, events, and happenings are taken as, or analyzed as, potential indicators of phenomena" as labeled by the researcher: "Every concept brought into the study or discovered in the research process is at first considered provisional…[then] earns its way into the theory by repeatedly being present in interviews, documents, and observations…or by being significantly absent" (p. 7). Concepts are constantly grouped into higher-level, more abstract categories through constant comparisons of similarity and difference. However, not all concepts will become categories, which serve as the "cornerstones" of theory development by providing "the means by which a theory can be integrated" (Corbin & Strauss, 1990, p. 7). Categories should work together to explain the relationships between abstract concepts represented in a data set, thus generating theory.

Objectivist methods to coding during the constant comparative process can be highly procedural (e.g., LaRossa, 2005) but I approached this process from a more constructivist perspective (e.g., Charmaz, 2006). First, during open coding (word-by-

word, line-by-line, incident-by-incident) I stuck closely to the data instead of precipitously applying existing constructs. This also involved in-vivo coding (Charmaz, 2006; Lindlof & Taylor, 2010), or labeling of words and phrases participants use to reflect cultural knowledge. Second, during focused coding (using significant and frequent codes to sort through large amounts of data) I tested the fit of categories and made decisions about directions for theory development (Charmaz, 2006; Glaser, 1978). Third, I followed Strauss and Corbin's (1990, 1998) guidelines for axial coding as the next step in the constant comparative process, where categories are related to specific subcategories; the subsequent core categories and subcategories were used to develop frameworks for understanding the emergent theory in my data set.

Categories can be deemed saturated when "gathering fresh data no longer sparks new theoretical insights, nor reveals new properties of these core theoretical categories" (Charmaz, 2006, p. 113). I used Nvivo software to help me sort and diagram the categories and their connections; these are all useful tools for determining saturation (Charmaz, 2006). Three other concepts from the constant comparative method also helped me move between coding stages towards saturation: theoretical memos, isolating data examples, and theoretical sensitivity.

Theoretical memos. A central step of the constant comparative method, writing theoretical memos, is designed to help the researcher carefully and accurately navigate the task of tracing their interpretive process. Despite the deceptively simple label, theoretical memos are not just casual notes a researcher records about their "ideas" during data collection and analysis (Strauss & Corbin, 1990, 1998). No formal standard

for writing memos exists, but researchers can envision this process in a number of ways. Strauss & Corbin (1990, 1998) describe memo writing as accurately recording categories, properties, hypotheses and generative questions when they occur, rather than after the fact. They advocate that researchers begin writing memos in conjunction with the start of coding and continue this process until a project concludes.

Similarly, Charmaz (2006) describes memos as conversations researchers have with themselves, a process of making ideas concrete and manageable through writing. As the "pivotal step between data collection and writing drafts of papers," these early memos can be used to explore early codes, direct further data collection, and develop basic questions (Charmaz, 2006, p. 72). Based on these recommendations, I began writing theoretical memos in GoogleDocs after completing my first interview in Norway and continued throughout fieldwork and analysis (see Appendix F for sample memo). These memos—approximately 80 single-spaced pages in total—were subsequently imported into NVivo and helped me visualize the graphic relationships between my categories, write up descriptions of categories, and determine when categories had become saturated.

Isolating data examples. Glaser and Strauss (1967) state that another important part of the constant comparative process is isolating data examples during analysis, working to "take apart the story" within the data (p. 108). When the time comes to write up theory by rearranging memos and field notes, not only is the story broken up by theme, but examples for each category have also been put aside. Isolating examples as they occurred to me, rather than waiting until I was writing up results, helped to ensure

the accuracy of my original interpretations. In addition, this strategy helped shape the narrative focus of this analysis and directions for theory building.

Theoretical sensitivity. According the Charmaz (2006), researchers using interpretive methods often have "guiding empirical interests to study…[that] give a loose frame to these interests" (p. 16). As such, from a practical perspective, being sensitive to existing theory allows researchers to articulate units of analysis, directions for interview schedule refinement, theoretical sampling, and goals of theory development. This notion is similar to what Blumer (1954) first described as sensitizing concepts in social research and can provide "a sense of how observed instances of a phenomenon might fit within conceptual categories" (Bowen, 2006, pp. 7-8). However, theoretical sensitivity is a controversial issue within grounded theory tradition.

On one hand, Glaser (1992) argues that researchers should refrain from reviewing relevant literatures prior to beginning a study, believing this approach offers the greatest possibility for new theoretical development. On the other hand, Strauss and Corbin (1990, 1998) and many management scholars (e.g., Parry, 1998; Suddaby, 2006) urge researchers to enter the field with as few assumptions about what they will find as possible, while still employing theoretical sensitivity. This implies that researchers should gleam what is useful toward interpreting their data from existing theory but resist the urge to force data into emergent categories based on that knowledge.

Although I entered the field as a cultural outsider, my approach towards gathering and analyzing data certainly relied on theoretical sensitivity. At first, I entered the field unsure of exactly what I was studying, how I would study it, or how it related to

communication; this was a truly inductive project. But as previously discussed, after returning home from my first fieldwork trip, I immersed myself in the organizational literatures for narrative studies to build the theoretical framework discussed in Chapter One. This framework helped me adapt my data collection and analysis strategies to reflect a narrative focus.

Narratalogical Methods

Studying organizations with narratological methods "attempts to describe and understand behaviors and beliefs by evoking a discourse of organizational reality" (Luhman & Boje, 2001, p. 159). From this perspective, my methodological choices were already aligned with those used in narrative research when I decided to move in this direction. I also began researching specific strategies for narrative interviewing (e.g., Lindlof & Taylor, 2010; Polster, 1987) to refine my questions to elicit more stories from participants (e.g., "Can you tell me about a time that strategy worked out successfully?"). Once I decided to incorporate archival data into this research, I also needed more insight into methods for locating and interpreting narratives from public policies. I found that just as organizational studies have taken a "narrative turn" over the last twenty years (Czarniawska, 2011), other disciplines are using narrative to studying complex issues.

For example, researchers have argued the connections between narrative and ethnographic fieldwork (e.g., Gubrium & Holstein, 1999), public policy (e.g., Jones & McBeth, 2010; Roe, 1994), cross-cultural management studies (e.g., Soin & Scheyt, 2006), and psychology (e.g., Hoshmand, 2005; McAdams, 1993; Polkinghorne, 2005). Moving forward, I relied on tools from two such perspectives—narrative inquiry and

narrative policy analysis—to complement the organizational narratology methods (e.g., Boje, 2001; Czarniawska, 1998) I deemed relevant for data collection, analysis, theory building, and reporting.

Narrative Inquiry

Within psychology research, narrative inquiry draws primarily from the work of Donald Polkinghorne, whose relevance to the narrative mode thought metaphor was discussed in Chapter One. Narrative inquiry is "directed at narrativized human experience or inquiry that results in narrative forms of data" (Hoshmand, 2005, p. 181). This can involve different methods of collecting data, such as fieldwork. Gubrium and Holstein (1999) compare ethnography, which "points broadly to the careful and usually long-term observation of a group of people that are locally experiences," and narrative research, which "refers loosely to the examination of the diverse stories, commentaries, and the conversations engaged in everyday life" (p. 561). As previously mentioned in this chapter, much of my fieldwork involved careful observation of the communicative practices in organizations where I conducted interviews, as well as the cultural dynamics I observed in my daily experiences living and working in Norway. These field notes—approximately 40 single-spaced pages—became one data source for narrative inquiry.

Narrative inquiry can also rely on "the general use of recorded conversations and/or collected texts (e.g., memos, emails, reports) as a data source" (Luhman & Boje, 2001, pp. 158-159). Hoshmand (2005) explains that interviewing participants involves "soliciting stories and oral histories," but also agrees with Polkinghorne that "the original research data" does "not have to be narrativized" as a precondition for narrative inquiry;

researchers "can construct a story about a person's life from chronological data as well as other kinds of observational data that are not presented in story form" (p. 181). However, Hoshmand and Polkinghorne also insist that narrative inquiry needs to distinguish data from that used in other forms of qualitative research.

Polkinghorne (2005) explains "the purpose of qualitative data is to provide evidence (i.e., to make evident) the characteristics of an experience" and "it is common in qualitative research to refer to this interview-produced collection of prose responses as a narrative account" (p. 142). However, in narrative inquiry, the term "narrative" is reserved for "a particular kind of produced discourse and to distinguish narrative responses from other prose responses" (p. 142). As such, other inductive qualitative methods do not always align with narrative inquiry; this distinguishes my project from using grounded theory in the strictest sense of the methodology. I utilize several iterative methods from the grounded theory tradition (e.g., constant comparative analysis, theoretical sampling), but do not present a new theoretical model of communication as the final results of this research.

Responses in narrative inquiry "have the form of a story with the beginning-middle-end structure" and from this form, "the described events and happenings are tied together by a plot, through which they are attributed meaning in terms of their contribution to the story's denouement" (Polkinghorne, 2005, p. 142). This unique structure and consequential function is based on the central process of both the narrative mode thought metaphor and narrative inquiry: emplotment. As I moved through interpretation with coding and categorization, I paid particular attention to aspects of

emplotment discussed in Chapter One. The first and simplest aspect of this process involved isolating and labeling each story in the data. I utilized the narrative mode thought metaphor to look for temporal cues (e.g., "This policy dates back to hydropower legislation from the 1900s") signaling a story's beginning, middle, and end. Furthermore, a plot can be organized by the unfolding sequence of events as characters attempt to achieve their goals (McAdams, 1993). As Hoshaman (2005) argues, "most life-story accounts also involve psychic or social conflict and its resolution as an organizing principle" (p. 182). This sequential aspect of emplotment also became important to organizing the many stories within this data set and how they related to one another.

Within the data I gathered from government organizations, I located many references to a larger narrative about the petroleum sector grounded in historical patterns of cultural resource management. This story was reminiscent of a biography; in tracing the origins and evolutions of a complex network of organizations for managing the policies and structures for managing the petroleum sector, I located one main character: the Norway Model. Thus, I set about piecing together this biographical history in Chapter Three using the "methodological principle of selectivity":

> Rosenthal (1993) explained that in reconstructing a narrated life story, such as with the help of interactive interviews, the narrator and the biographer make selections on the basis of sequentiality. Selection of action sequences from reported activities takes into account the range of possibilities and the decision to eliminate certain possibilities as opposed to others...While the biographer is carried by the narrative flow in the storytelling, each text sequence is interpreted for relevance in the context of the overall construction of the main narration.

> Thus, in addition to the thematic hypotheses, a part-to-whole configuration is involved in a holistic rather than reductionistic or linear analysis. (Hoshmand, 2005, p. 182)

Each of the stories presented in Chapter Three were selected based on their relevance as action sequences in the overall construction of a larger narrative.

Overall, the data I collected, as well as the analytical methods I use to interpret these data, are consistent with narrative inquiry. A third methodological component, reporting, is also important in qualifying narrative inquiry. Hoshmand (2005) argues that "at least three types of report" are appropriate for this type of research: "a descriptive report of a privately constructed self-account in its original narrated form; a recounting of a dialogically generated narrative or set of narratives in a story form; and a storied account of an experience constructed from interviews, written reports, observations, and artifacts" (p. 181). Chapters Three and Four of this dissertation blend these three types of reporting. The chapters are written in a narrative style, describe individual and organizational stories in their original forms, and present a collection of stories I collected during fieldwork. Chapter Three is framed within a larger narrative of the cultural history of Norwegian resource management; Chapter Four is framed within a larger narrative of my field experiences in the Lofoten Islands and Oslo. Within both of these frameworks, organizational stories and local stories are woven together to form sequential and thematic narrative categories.

Narrative Policy Analysis

Jones and McBeth (2010) explain that in response to an epistemological and ontological divide in their discipline, Roe (1994) introduced *narrative policy analysis* for studying "policy areas of high uncertainty, complexity, and polarization" (p. 335). The first step of this method involves identifying "policy narratives (defined as having a beginning, middle, and end)" (p. 335). Next, "alternative narratives that do not conform to the dominate policy narrative(s)" are identified; these two groups are compared in step three and a "grand policy metanarrative is derived from the comparison" (p. 335). In the fourth and final step, the researcher decides how this metanarrative could be examined using more traditional tools for policy analysis such as statistics and microeconomics.

As previously mentioned, using narrative inquiry provided a reference point for interpreting a larger, biographical narrative of the Norway Model. Similarly, the notion of locating a grand policy metanarrative is related to Boje's (2001) conception of grand narrative. Boje (2001) describes a grand narrative, or what Lyotard (1984) calls metanarrative, as one that "subjugates and marginalizes other discourses" (p. 33). Borins (2011) argues that within public administration research, narrative policy analysis recognizes "the importance of narrative as both social mechanism (a means of forming and communicating identity and an understanding of the world) and hermeneutic practice (a mode of knowing, a way of organizing, and making sense of experience" (p. 167). These descriptions are reminiscent of the narrative mode thought and sensemaking metaphors described in Chapter One.

In addition, Borins (2011) argues that narrative polyphony, a concept similar to Boje's (1995) plurivocality from the Tamara metaphor, must be recognized when analyzing and reporting narrative research:

> Public administration scholars often communicate their research as though they were the omniscient narrators of 19th-century novels, confident of their ability to see into the minds of their protagonists to produce a single, self-authorizing story…Narratology accepts as a fundamental tenant that there are many conflicting and often irreconcilable narratives to be read within the frame of a single text…Pursuing this approach obligates the scholar to engage with the conflicting narratives, to account for their presence and implications, and, if she chooses, to privilege some over others, to explain why. (p. 185)

Since narratives have multiple interpretations (i.e., plurivocality), it follows that some stories may be privileged above others, and grand narratives are likely to be privileged over their local counterparts. Labeling a story as grand or metanarrative connotes a hegemonic angle, which is certainly relevant when interpreting the local stories presented in Chapter Four. However, researchers can encourage multiple interpretations by utilizing "discursive metaphors [that] 'read' story plurivocality…back into the constructions that organizations collectively 'write' as their history" (Boje, 1995, p. 998). As described in Chapter One, I use discursive metaphors throughout this dissertation to examine the underlying assumptions of what is being communicated by these stories.

Roe (1994) suggests that scholars look for "arguments that underwrite the policy assumptions of policymaking" in these narratives (p. 155). Guided by the open architecture framework, I looked for different ways that narrative is applied to

communicate policy assumptions. For example, I noticed a recurring theme in many stories about Norway overcoming large and difficult challenges despite their status as a small and peaceful country by working hard and planning ahead. I created a category called "David & Goliath" for these stories and considered what an actor or organization was trying to communicate by applying this metaphor in a narrative account. For some, it was a sense of pride in successfully dealing with the unpredictable giant-of-a-neighboring country Russia during decades years of border disputes. Others implied the Norwegian petroleum sector has accomplished almost fantastical results when considering they are a country of only five million people; they almost can't believe it has worked out so well. Furthermore, in researching the history of major oil and gas field developments such as Snøvit, I found references to Norwegian folk tales depicting the same plotlines of small yet smart characters defying the odds to succeed where many others have failed.

Each of these "David and Goliath" stories celebrated cultural Norwegian values in action and as such, were coded as celebration narratives. This example also illustrates the connections between metaphor and narrative in producing cultural meaning. Hoshmand (2005) explains "metaphors can serve to organize a story and persuade the reader of its broader cultural implications…certain story lines make sense in light of larger cultural scripts and background understandings" (p. 182). The stories in this category communicate a larger cultural understanding with a familiar organizational structure. Furthermore, I coded this category with my own metaphorical reference; these narratives deal with Norwegian values, but the story of David and Goliath is ubiquitous enough to communicate cross-cultural lines of understanding.

In conclusion, Borins (2011) explains how public administration scholars who employ a narrative approach can "share a methodological common ground" (p. 167). Similarly, Roe (1994) envisioned narrative policy analysis as "a technique best applied using a case study approach prior to engaging more traditional positivistic applications of policy analysis" (p. 12). This leads to the next section, where I discuss how case study methods are complementary to other interpretive and narrative tools in this project.

Case Study Methods

While researching existing literature on the Norwegian petroleum sector and culture, I discovered that most qualitative research on this topic utilizes case methodology (e.g., Hatakenaka, et al., 2006; Ihlen & Berntzen, 2009; Vaaland & Heide, 2005, 2008). Case study methods are used for analytic generalization (Yin, 1994) and are appropriate in three scenarios: when the researcher seeks to answer ''how'' or ''why'' questions; when the researcher has little control over the contemporary real-life context to be studied; and when the boundaries between the context and phenomenon are not clear (Jackson, et al., 2007). This project certainly meets such requirements based on my research questions, the fluidity of the context I am studying, and the clarity of boundaries between the theoretical contexts and communicative phenomena in this data.

Furthermore, according to Yin (1999), case study methods are favorable for studying complex "mega-systems" with "high-flux" rules and affiliations (p. 1210). The "desirable features" of case studies include "systematic and intense use of archival data…insightful and detailed fieldwork by single investigators…[and] a thorough sifting of policy documents and interview data related to decision making in a nationally

prominent setting" (Yin, 1999, p. 1210). Again, these criteria are much aligned with the contexts of this project, and thus, I adopted several case study methods to situate my research within the social science literatures about the Norway Model and the theoretical literatures about organizational narratology.

There are many overlapping concepts between interpretive, narrative, and case study methodologies such as fieldwork, constant comparative analysis, and theoretical saturation (Eisenhardt, 1989). However, a distinct concept in case study methods, the *degrees of freedom* approach to analytic generalization (Campbell, 1975), helped me clarify the unique theoretical contributions of this research, in addition to offering additional measures for reliability and validity.

Degrees of Freedom

As with other qualitative methods, case studies do not definitively test theory. Case study methods examine the relevance of theories to one set (N) of data relating to specific phenomena, as well as those theories' relevance to other aspects of culture. Campbell (1975) first outlined the degrees of freedom approach in case study research, asserting that social sciences required "a tradition of deliberately fostering an adversary process in which other experts are encouraged to look for other implications of the theory and other facts to contradict or support it" (p. 186). Campbell (1975) states:

> In case study done by an alert social scientist who has thorough local acquaintance, the theory he uses to explain the focal difference also generates predictions or expectations on dozens of other aspects of the culture, and he does not retain the theory unless most of these are also confirmed. In some sense, he

> has tested the theory with degrees of freedom coming from the multiple implications of any one theory. (p. 181)

Related to the idea of theoretical sensitivity, the degrees of freedom approach means that researchers use existing theory as a starting point for examining a social phenomena. Using a method like constant comparative analysis, the possible scope of relevant theories is narrowed based on their fit with emergent concepts from the data.

For example, at first, I was interested in the relevance of stakeholder theory to understanding the communicative implications of the Norway Model. As with case study methods, much of the existing communication and management research about the Norwegian petroleum sector relies on stakeholder theory. However, as I collected and analyzed more data, stakeholder theory did not seem to fully capture the nuances of communicative phenomena in this cultural context. As Woodside and Wilson (2003) argue, a case study should illustrate "deep understanding of the actors, interactions, sentiments, and behaviors occurring for a specific process through time" (p. 497):

> In many case studies, multiple individuals participate in different conversations and behaviors within one time period in the case…much like actors appearing in different scenes in a play, different individuals in the same group may participate in conversations and behaviors in different time periods…when examined deeply, most cases involve three or more (in)formal groups or organizations that affect the process and outcomes under study…[and] not every person within a group communicates with every other member in the same group. (p. 505)

The processes and outcomes of study in this project are communications between and within numerous organizations involved with the long-term success and development of

Norwegian petroleum activity. Utilizing a degrees of freedom approach, the perspectives of these multiple actors and organizations, as well as how they are situated within the larger context of Norwegian culture, can be considered N=1.

Additional Measures for Reliability & Validity

As illustrated by the previous example of stakeholder theory, the degrees of freedom approach also offers an important measure for reliability and validity in this project: theoretical triangulation. Eisenhardt (1989) asserts that when interpreting theory, comparing emergent concepts with a broad range of conflicting and similar literature is an "essential feature" of case study methods to build internal validity, sharpen generalizability, and improve construct definition (p. 544). In addition, theoretical triangulation allows researchers to remain open to new directions for theoretical development (Creswell & Miller, 2000; Maxwell, 2004).

In addition to theoretical triangulation, within interpretive, narratological, and case study approaches, multiple data sources can be triangulated (e.g. interviews, previous research, observations, documents) to enhance the validity of theoretical categories (Creswell & Miller, 2000; Lindlof & Taylor, 2010; Maxwell, 2004). Utilizing multiple sources of data, such as interview transcripts, government documents, newspapers, and books, is consistent with these three methodologies. According to Yin (1994), using case study methods allows a researcher to further triangulate data during the collection process by following a directed line of inquiry and evidence gathering. Furthermore, "the more all of these techniques are used in the same study, the stronger the case study evidence will be" (Yin, 1999, p. 1217). As previously mentioned, in

addition to semi-structured interview data, I used archival data, fieldwork observations, and theoretical memos for triangulation.

Finally, combining these multiple methodological approaches through the lens of case study also provides what Geertz (1973) described as "thick description" of a phenomena based on the rich and detailed nature of discussion. In accordance with Campbell (1975) and Yin (1994), Woodside and Wilson (2003) state that the distinguishing characteristic of case study research is "focusing on the research issues, theory, and/or empirical inquiry on the individual (n=1)" to offer thick description. Rather than assessing external validity based on the generalizability of their research findings, researchers employing case study methods can use thick description to enhance what Guba and Lincoln (1989) refer to as transferability. While the exact findings from cases cannot be generalized to larger populations in a quantitative sense, emergent theoretical concepts should still be transferable to other contexts and settings. This deep, longitudinal perspective is aligned with the narrative focus of how this research was conducted, its presentation in this dissertation, and its transferable value to other contexts of organizational communication research.

Chapter Summary

Overall, this hybrid inductive approach—combining relevant aspects of interpretive, narratological, and case study methods—ensured that throughout the research process, I was choosing the appropriate tools for answering the research questions presented in Chapter One. Utilizing these connected approaches further situates this project within the broader context of organizational communication research and

provides unique interdisciplinary appeal for social scientists studying complex issues of natural resource management, culture, and narrative.

Chapter Three: The Ten Oil Commandments

> "Norway's petroleum resources belong to the Norwegian People, and they must be managed in a way that benefits the entire Norwegian society."
>
> *Norwegian Ministry of Petroleum and Energy (2011, p. 5)*

This chapter presents the grand narrative of how Norway has created and adapted organizational structures and policies for managing natural resources to ensure the benefit of past, present, and future generations. The Norway Model was officially established with "The Ten Oil Commandments," a historic policy approved by Norwegian parliament (Storting) in 1971 and rooted in a centuries-long history of cultural values: connection with nature, reverence for tradition, strong national identity, and egalitarian social democracy. Using the strategic philosophy outlined in the Ten Oil Commandments—oil and gas should benefit the whole nation—the organizations and regulatory policies for guiding state petroleum activity have anticipated and adapted to challenges over this fifty-year adventure.

Drawing upon policy documents, white papers, and other texts I collected from the government organizations that belong to this management system, this chapter examines the "official" story of how Norway has transformed itself from a small Northern maritime country into a successful global energy producer (see Appendix E for a chronological listing of influential policies). Within each section of this chapter, different narratives illustrate how the Ten Commandments have been interpreted and enacted throughout the history of the Norway Model.

The Oil Adventure Begins: Establishing the Commandments

The story of Norway's "oil adventure" began in the late 1950s (MFA, 2006; MPE, 2010a; NPD, 2012). Until that time, the country relied on imported petroleum and coal, lacking the geological expertise required for petroleum development. Many people were skeptical that the Norwegian continental shelf (NCS) contained enough oil and gas to make exploration a worthwhile endeavor. But when Shell discovered natural gas in the Netherlands in 1959, attitudes towards the North Sea's potential began to shift; it was only a matter of time before foreign oil companies started knocking on the Norwegian government's door. In 1962, the Phillips Group from Bartlesville, Oklahoma applied for exploration licenses in the North Sea, which the government granted the next year. However, these licenses only allowed Phillips to conduct seismic studies and other exploration activities; the state refused to offer any one company exclusive production rights over the NCS. This refusal was officiated by a Royal Decree[2] in 1963:

> The company wanted a licence for the parts of the North Sea that were on Norwegian territory, and that would possibly be included in the Norwegian shelf. The offer was 160,000 dollars per month. The offer was seen as an attempt to get exclusive rights, and for the authorities it was out of the question to hand over the whole shelf to one company. If the areas were to be opened for exploration, more companies had to participate. In May 1963, Einar Gerhardsen's government proclaimed sovereignty over the NCS. New regulation determined that the State owns any natural resources on the NCS, and that only the King (government) is authorized to award licences for exploration and production. (MPE, 2010a)

[2] Royal Decree of May 31, 1963, Relating to the Sovereignty of Norway Over the Seabed and Subsoil Outside the Norwegian Coast

The proclamation that "only the King" could control licensing and production of NCS petroleum reflected a larger historical context of Norway's centuries-long quest for sovereignty. After nearly four hundred years under Danish control, Norway declared itself an independent kingdom and ratified a constitution on May 17, 1814, which is still the country's official national holiday. Later that year, a short war with Sweden forced a union between the countries, allowing Norway to keep their constitution and self-govern all but their foreign affairs. In June 1905, Norwegian parliament voted to dissolve their Swedish union and another war seemed imminent. However, the countries were eventually able to peacefully negotiate separation and Sweden recognized Norway as an independent constitutional monarchy on October 26, 1905.

Another important precedent for the Royal Decree dealt with hydropower legislation dating back to 1906. As a mountainous coastal nation filled with waterfalls, lakes, and rivers, Norway has long relied on hydropower for cost-effective electricity. Around the turn of the twentieth century, energy-intensive manufacturing industries such as aluminum and fertilizer, as well as foreign electricity investors, began looking at Norway for these plentiful hydro resources. However, the government struggled with how to profit from foreign investors without ceding too much control over their resources. According to former Deputy Director General of the Ministry of Petroleum and Energy Torre Tønne (1983):

> The rapid increase of foreign interest in Norwegian hydro resources triggered one of Norway's most complex and important political struggles. According to Norwegian law, rivers, waterfalls and lakes may be privately owned. As a result,

> it soon became clear that foreign capital could gain control of substantial natural resources. This led to the passage of legislation in 1906 that required anyone, Norwegian or foreign, to obtain a "concession" from the public authorities before acquiring a waterfall. (p. 723)

Concession, in this context, referred to permission from the King for proprietary use of waterfalls generating over a certain amount of horsepower. Since Norway had only recently received its independence from Sweden, and the political climate of 1906 was still somewhat "hectic," this temporary legislation was also known as the Panic Act (Tønne, 1983, p. 724). Not only were foreign investors urging private owners to sell what many Norwegians "considered national resources," many of these owners were unaware just how much their properties were worth (Tønne, 1983, p. 724). In 1917, two more permanent pieces of legislation were passed—the Concession Act and the Water Regulations Act—that have "together regulated the development of hydropower in Norway ever since" (Tønne, 1983, p. 724).

Nearly fifty years later, the government once again focused on establishing Norwegian sovereignty over its natural resources. The first task was demarcating Norway's territories from their North Sea neighbors. Expanding on the May 31, 1963 Royal Decree, Storting passed the Submarine Resources Act a month later[3] to address exploring and exploiting subsea regions of the continental shelf belonging to Norway (Tønne, 1983). In March 1965, the government negotiated border agreements with

[3] Act of 21 June 1963 No. 12, Relating to Exploration for and Exploitation of Submarine Natural Resources

Denmark and Great Britain for the southern regions of the NCS.[4] With those boundaries established, in April 1965, Norwegian authorities announced the first round of NCS concessions; 278 blocks would be available for licensing applications (Kvendseth, 1988). At an August press conference, the Ministry of Industry announced concessions—22 permits for 78 blocks—that granted companies such as Phillips, Esso, and Amoco exclusive rights for exploration, drilling, and production in their licensing areas on the continental shelf (MPE, 2010a).

Great Discoveries: Vikings & Fish

When the first major field in Norway's oil history, Ekofisk, was discovered in 1969, "the Norwegian oil adventure really began" (MPE, 2010a). Still a significant producer some forty years later, Ekofisk is also an important part of Norwegian cultural history. In addition to a dedicated exhibit at the Norwegian Petroleum Museum, the Norwegian Directorate for Cultural Heritage and Phillips Group Norway commissioned a national online archive initiative for documenting Ekofisk's first development phase. As part of this project, Stig Kvendseth, (1988) wrote *Giant Discovery: A History of Ekofisk Through the First 20 Years* to chronicle the inception and development of this important field. According to Kvendseth, when Phillips was initially granted exploration permits in 1963, as a newer company, they were also looking to garner public support and capitalize on Norwegian shipbuilding expertise. So in 1965, Phillips contracted with another American company, Ocean Drilling and Exploration Company, to lease the first

[4] These agreements were based on the Geneva Convention of 1958, although Norway did not officially ratify the treaty until 1971, after negotiating a delineation agreement with Sweden in 1968 (Tønne, 1983).

Norwegian-built drilling rig, the *Ocean Viking*. Figure 6 illustrates the rig (Kvendseth, 1988, p. 20).

Figure 6. *The "Ocean Viking"*

The "Ocean Viking" drilling rig is towed out Oslofjord. "The good luck rig" on the Norwegian shelf was owned by ODECO. Phillips chose to specify that the rig be built in Norway as part of the strategy to utilize Norwegian goods and services.

Phillips also joined Esso—the first company to drill on the NCS with its American-built rig, *Ocean Traveler*—with operations headquarters in the southern coastal city of Stavanger. In addition to utilizing Norwegian builders for *Ocean Viking*, Phillips advertised jobs for local rig workers in Stavanger, with nearly 2000 interested men responding. When *Ocean Viking* drilled its first well in 1967, it was clear that exploring the North Sea would be no easy feat for the Norwegians and Americans on board. Extreme storms, icy waters, and tumultuous waves created steep learning curves and dangerous working conditions, but the crew foraged ahead for two more years, tweaking their technology and operations all along the way. In December 1969, Phillips finally hit pay dirt when *Ocean Viking* explorers discovered an estimated 2.7 billion barrels of recoverable oil on the NCS. The field already had a name—Ekofisk—but the story behind it was "something of a linguistic anomaly," according to Kvendseth (1988):

> Right from the start, Phillips had used letters to identify the various exploration areas on the Norwegian shelf. This was done in order to group the blocks geographically and make it easier to identify them. It started with A-blocks, B-blocks, etc. The idea was to call the fields by the names of types of fish. When the discovery was made in an exploration area "C," it was easy to find the name of a fish to correspond—Cod [an unsuccessful commercial field]. But what fish had a name that began with E? Eel had already been used on a structure block at 2/7. Earl Walters at Phillips' London office suggested Ekofisk, and no one objected. So Ekofisk it was—even though it should have been spelled Ekkofisk in Norwegian, or Echofish in English. Confusion as to the correct name arose, and in reports, letters, newspaper articles—yes, even in parliamentary papers from the early days, the three different spellings were used interchangeably. (p. 33)

Ekofisk's name was not the only source of confusion for Norwegian authorities, media, and citizens; the world was watching to see if the North Sea really could produce oil. But after five years of hopes and disappointments in these cold waters, Phillips and Norway hesitated to confirm their giant discovery.

On May 14, 1970, the Norwegian government communicated their official position on Ekofisk as cautiously optimistic until further testing confirmed the size of the field and the quality of its oil. On that same day, the chairman of a Phillips subsidiary company in Belgium effectively issued a "declaration of commerciality" at their annual meeting by announcing "that Ekofisk contained several hundred million tons of crude oil of very fine quality," (Kvendseth, 1988, p. 38). Amidst a whirlwind of international media speculation, Storting issued a formal report on June 12, 1970, estimating the government payout from Ekofisk could range from 100 to 500 kroner (approximately

$16-$85 USD) per year for the next twenty to thirty years. In a follow-up report one year later, Storting revised its estimations to an astonishing 2.5 to 3.5 billion kroner (approximately $45-65 million USD) in tax income from Ekofisk per year and more than twice the petroleum needed to satisfy Norwegian consumption at that time.

To Benefit the Whole Nation

As Ekofisk and other fields signaled an increasingly long-term potential for petroleum activity on the NCS, the government was also rethinking its regulatory system, realizing that organizational change was necessary (NPD, 2009). Norwegian authorities gradually opened other NCS areas for exploration and production, but still placed heavy restrictions on the number of blocks awarded to foreign companies during each licensing round. From the beginning, Norway recognized the importance of maintaining sovereignty over their resource-rich land. According to Austvik (2012),

> The Norwegian state was one of those states outside OPEC that wanted to control revenue, production, and management of what in the early 1970s was a new and potentially economically and politically dominant industry for the country. Long social-democratic traditions, which were shared across party lines, of strong state participation in many economic activities made it possible to formulate consensus-oriented visions and policy goals for an independent Norwegian petroleum administration and industry in the early 1970s…The slogan was that oil and gas activities should "benefit the whole nation." (pp. 321-322)

As evidenced by this slogan, there was a strong political imperative—built on social democratic ideology and a consensus-based approach to public policy formation—to

keep petroleum activities within the public sector and maximize profits to be filtered into social welfare programs (Kristoffersen & Young, 2010).

Again, we see the historic continuity of how cultural traditions have influenced the organizational policies for managing Norwegian resources. Early-twentieth century hydropower legislation emphasized "that the Norwegian people are the owners of the water resources, and that the economic rent should fall to the greater community," and these "same principles have been followed in the administration of petroleum resources" (MPE, 2011, p. 5). Yet despite such precedent, when NCS petroleum activity exploded with the Ekofisk discovery, the government still hadn't legislated an official plan for maximizing the long-term social and economic benefits of Norwegian oil and gas.

Storting took up that task with *White Paper No. 76 (1970-1971), Exploration for and exploitation of subsea natural resources on the Norwegian continental shelf, etc*. As a result of this policy paper, Storting endorsed the famous Ten Oil Commandments on June 14, 1971 and outlined a comprehensive national management system for petroleum activity that would benefit the whole of Norwegian society. Figure 7 illustrates the commandments (MPE, 2011). These ten stipulations established three functions of state-controlled petroleum development: (1) centralized control of official policy formation and development; (2) administrative control of licensing, inspection, and surveying; and (3) business control of taxes and state licensing participation (NPD, 2009).

Figure 7. *The Ten Oil Commandments*

Box 1.1 The 10 Oil Commandments

The 10 Oil Commandments are Chapters in a declaration of principles underpinning Norwegian oil policy, submitted by the Standing Committee on Industry in a Storting White Paper dated 14 June 1971. These principles have subsequently been dubbed the 10 Oil Commandments, and represented a clarification of what was needed to make sure that the oil activities would "benefit the entire nation":

1. That national supervision and control of all activity on the Norwegian Continental Shelf must be ensured.
2. That the petroleum discoveries must be exploited in a manner designed to ensure maximum independence for Norway in terms of reliance on others for supply of crude oil.
3. That new business activity must be developed, based on petroleum.
4. That the development of an oil industry must take place with necessary consideration for existing commercial activity, as well as protection of nature and the environment.
5. That flaring of exploitable gas on the Norwegian Continental Shelf must only be allowed in limited test periods.
6. That petroleum from the Norwegian Continental Shelf must, as a main rule, be landed in Norway, with the exception of special cases in which socio-political considerations warrant a different solution.
7. That the State involves itself at all reasonable levels, contributes to coordinating Norwegian interests within the Norwegian petroleum industry, and to developing an integrated Norwegian oil community with both national and international objectives.
8. That a state-owned oil company be established to safeguard the State's commercial interests, and to pursue expedient cooperation with domestic and foreign oil stakeholders.
9. That an activity plan must be adopted for the area north of the 62nd parallel which satisfies the unique socio-political factors associated with that part of the country.
10. That Norwegian petroleum discoveries could present new tasks to Norway's foreign policy.

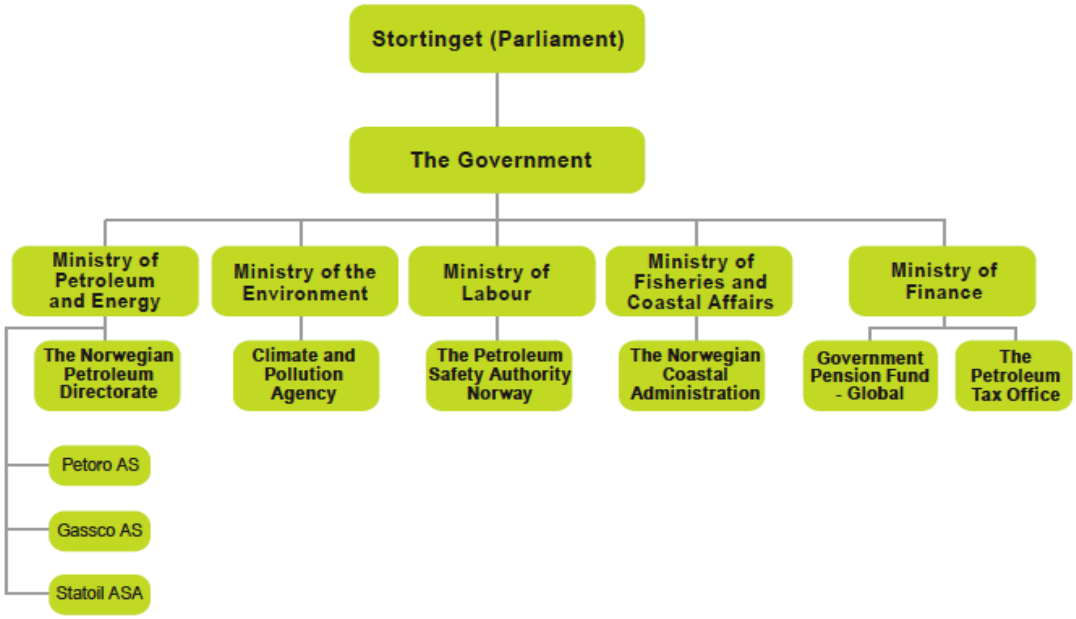
To realize these functions and goals, the government would create a formal organizational structure for managing the economic, social, and environmental impacts of petroleum activity to benefit the whole nation: the Norway Model.

Structural Organization of the Norway Model

These organizations and policies have adapted since 1971, but consistently reflected the values communicated through the Ten Oil Commandments. Figure 8 illustrates the current structure of the Norway Model (MPE & NPD, 2012, p. 17).

Storting, as representatives of the people, sits at the top of the hierarchy. Under the umbrella description of "the Government," various ministries work together to oversee the regulatory aspects of NCS petroleum activity such as industry, safety, pollution, and taxation. In addition to the five agencies illustrated below, the Ministry of Foreign Affairs deals with many issues of Norwegian sovereignty and diplomacy related to oil and gas. Other organizations (e.g., political parties, local governments, NGOs) are also connected to this elaborate network of policymaking, regulation, and commercial activity.

Figure 8. *Organizational Structure of the Norway Model*



To further understand the relationships between these organizations and policies, the remainder of this chapter continues the Ten Oil Commandments story and how it has shaped the Norway Model over time. Commandments One and Seven are embodied in the centralized control and administration functions of organizations such as the Ministry of Petroleum and Energy and Norwegian Petroleum Directorate. These organizations, in

partnership other government ministries, have combined industry-savvy business practices, innovative technology, and environmental considerations to realize Commandments Three, Four, Five, Six and Eight. Finally, Commandments Nine and Ten have presented new environmental, political, and economic challenges to the Norway Model and this oil and gas fairytale.[5]

Developing Centralized Control & Administration: Commandments One & Two

Commandment One: That national supervision and control of all activity on the Norwegian Continental Shelf must be ensured.

Commandment Seven: That the State involves itself at all reasonable levels, contributes to the coordinating Norwegian interests within the Norwegian petroleum industry, and to developing an integrated Norwegian oil community with both national and international objectives.

Commandments One and Seven clarified the goals of state supervision and control by building on the 1963 Royal Decree declaring "only the King" could issue exploration and drilling permits for Norway's territories on the continental shelf. Until the commandments were issued, all government resource management responsibilities fell under the purview of the Ministry of Industry as dictated by the national constitution. In 1972, Storting established a more centralized body within the Ministry, the Norwegian Petroleum Directorate (NPD), to handle the administrative functions—licensing, inspection, and surveying—of regulating petroleum activity. The NPD would be

[5] Commandment Two was realized almost immediately after Ekofisk signaled Norway's energy independence for the foreseeable future.

headquartered in Stavanger, which by now had become Norway's "oil capitol" since Phillips first set up operations there in 1965.

Since the Ministry of Industry was still constitutionally responsible for ensuring worker safety and environmental disaster planning on the continental shelf, these duties were also shifted to the NPD. However, in 1978, the government decided that oil and gas concerns necessitated not only a separate regulatory agency, but also a separate ministry. Through the newly established Ministry of Petroleum and Energy (MPE), the state would "approve all steps and at all levels in the sector in order to promote both competition and cooperation so that the value of each license would be maximized" (Austvik, 2012, p. 321). The following year, Storting also deliberated whether the same agencies tasked with supervising state business interests should be monitoring worker and environmental safety interests. The resulting decision transferred the latter responsibilities to the Ministry of Local Government and Labour; for the next two-and-a-half decades, the NPD would report to two ministries.[6]

Several other policies would emerge over those decades to support Commandments One and Seven. A revised Royal Decree was issued in 1972 to include additional Norwegian territories on and around the continental shelf.[7] These decrees, as well as the Submarine Resources Act, were both replaced by a more comprehensive legal

[6] In 2001, working environment and safety responsibilities were again transferred to the renamed Ministry of Labour and Government Administration.

[7] Royal Decree of December 8, 1972, Relating to Exploration for and Exploitation of Petroleum in the Seabed and Substrata of the Norwegian Continental Shelf

framework in 1985.[8] This framework was expanded again by the 1996 Petroleum Act[9] to reflect the evolving organizational structures and social contexts of state regulatory agencies. For example, the Petroleum Act reinforced that all NCS petroleum activities (e.g., licenses, exploration and development plans, transport contracts, sales contracts) fall under MPE jurisdiction, but that Storting has the final say over any plans with "significant economic or social impact" (Statoil, 2009, "Regulation"). Storting again deliberated on the division of safety and business interests with *White Paper No. 17 (2002-2003), Related to State Supervision* (NPD, 2003). As a result, the NPD was split into two independent agencies; henceforth, the Petroleum Safety Authority Norway (PSA) would supervise all regulatory safeguards for working conditions and emergency preparedness on the NCS.

In addition to involving itself in these regulatory and organizational aspects of petroleum activity, the state has implemented Commandments One and Seven through Norway's unique petroleum taxation system. With the Petroleum Taxation Act[10] of 1975, onshore commercial oil and gas activities were taxed at 28% and subsea (offshore) activities at 50% because of their "extraordinary profit" potential (MPE & NPD, 2012, p. 16). This taxation system, still in place today and overseen by the Ministry of Finance (MoF), was "designed to be neutral," (i.e., profitable for investors both before and after taxes) in order to "safeguard the consideration both for substantial income for society as a whole, as well as the fact that companies want to implement profitable projects" (MPE &

[8] Act of 22 March 1985 No.11, Relating to Petroleum Activities
[9] Act of 29 November 1996 No. 72, Relating to Petroleum Activities
[10] Act of 13 June 1975 No. 35, Relating to the Taxation of Subsea Petroleum Deposits

NPD, 2012, p. 16). In other words, Norway's taxation rates may be high when compared with other resource-rich nations, but regulators frame this system as a "win/win" for the both state and the private companies.

Overall, this organizational and regulatory system of centralized control and administration enabled the state to maintain sovereignty over its natural resources and facilitated the growth of a national oil and gas industry in Norway. As the following sections will elucidate, the state began this industry by capitalizing on the tax income and resources of foreign investors and never losing sight of one primary goal: *Norway* would be the most successful and powerful operator on the Norwegian continental shelf.

Developing New Business Activity: Commandment Three

Commandment Three: That new business activity must be developed based on petroleum.

National economies that experience large economic booms from natural resource exploitation often suffer from what is known as "Dutch disease" (*The Economist, 1977*). As the Netherlands experienced in the 1960s when "natural gas discoveries clearly hurt the competitiveness of Dutch manufacturing," resource booms are usually associated with appreciated currencies and exchange rates, as well as the "crowding out" of other industrial sectors (Krugman, 1987, p. 49). While the term "disease" can be misleading since boom are theoretically favorable, historically, this effect has been detrimental for many countries with resource-based economies (Krugman, 1987; Torvik, 2001). Economists attribute this to the "spending effect" of booms (Corden & Neary, 1982), or in simpler terms, when a country invests new resource money right back into their

domestic economy or immediately to fund social programs (e.g., poverty reduction). As a result, these countries can experience unstable economies; natural resource markets are hard to predict.

Although the term "Dutch disease" had not yet come into academic or public discourse when the Oil Commandments were created, the Norwegian government knew that to build an oil economy for the long-term, they needed measures for preventing inflation and building other industries. Thus, Commandment Three outlined two ways the Norwegian state planned to avoid these pitfalls: (1) cultivating petroleum-related industrial sectors to build a national culture of oil and gas expertise; and (2) creating a balanced domestic and international investment strategy.

Developing a National Culture of Expertise

Developing strong petroleum-related industries over time has been a core value in the state's overall strategy. Because of the unique challenges associated with exploring and developing oil and gas on the Norwegian continental shelf—huge waves, icy waters, tumultuous storms—"the petroleum industry provides a strong impetus to technological development within other Norwegian industries" such as manufacturing, shipping, and subsea technology (MPE & NPD, 2012, p. 22). Figure 9 explains how traditional Norwegian maritime industries laid the foundation for building a new national expertise (MPE, 2012, p. 137). This figure—part of a 2011 Ministry of Petroleum and Energy report to Storting entitled *An industry for the future: Norway's petroleum activities*—portrays the *Normand Prosper* ship as a symbol of merging past and present "traditions and knowledge."

In the beginning, Norway didn't have the geological know-how or the financial resources to start a national petroleum industry on their own. But the North Sea quickly showed foreign companies they needed Norwegian experience to build their ships, adapt their technologies, and work on their rigs.

Figure 9. *Industry Founded on Traditions*

Box 8.1 Industry founded on traditions

The petroleum activity on the Norwegian Shelf requires solutions that are adapted to the weather and sea conditions in the North Sea, Norwegian Sea and Barents Sea. The strong traditions and knowledge from shipping and shipbuilding provided a good foundation for taking the next step and delivering goods and services to the petroleum activity as well. With this point of departure, the Norwegian maritime sector and associated equipment suppliers have developed into an important part of the petroleum-oriented supply industry. About 90 per cent of the overall contract value of ships delivered from Norwegian shipyards during the period 2009-2013 goes to vessels used in the oil and gas activities.

Norwegian offshore shipowners own and operate one of the world's most advanced offshore fleets. The Norwegian fleet of service vessels (supply, anchor handling and specialty ships) is the second largest in the world. For every offshore ship built in Norway, jobs are created across the country. The building of the anchor handling ship «Normand Prosper» involved equipment deliveries from 91 Norwegian companies. The ship was delivered on 9 April 2010, from STX Norway Offshore in Brattvåg to Solstad Offshore ASA in Skudeneshavn.

Since the *Ocean Viking* was built in 1965, the supplier industry has become a vital part of the national economy, employing more than 200,000 Norwegians (NPD, 2011) and quintupling international export sales in the last fifteen years alone (MPE & NPD, 2012). And as the international industry increasingly looks North in search of oil and gas resources, Norway has uniquely positioned itself as a global expert on discovering, extracting, and transporting petroleum from these very hard-to-reach places based on their cultural heritage of work and innovation.

Strategic Domestic & International Investing

Another aspect of the state's planning for avoiding Dutch disease and maintaining Norway's petroleum wealth for years to come was implementing strategic domestic and international investments. In 1967, the government had revised its social security scheme by passing the National Insurance Act.[11] This legislation expanded public assistance and financial benefits to nearly every Norwegian citizen and established a new organization under the Ministry of Finance, Folketrygdfondet, to manage state pension fund investments. Part of ensuring the oil money benefited the whole nation included expanding government social welfare programs, but a more long-term action plan was necessary. As a follow-up report to the Ten Oil Commandments, in *White Paper No. 25 (1973-1974), Petroleum activity and its position in the Norwegian society* the government called for a "qualitatively better society."

This report communicated that in addition to developing a national expertise for petroleum management and commercial activity, the government was concerned with the short-term effects of their quickly overflowing coffers such as extreme inflation (Reiche, 2010). According to a 2011 MPE white paper:

> When the Bratelli government presented the first comprehensive report to the Storting on the integration of the petroleum sector into the Norwegian economy in 1974, an ambition was adopted which stated that the oil revenues should primarily be used to develop "a qualitatively better society"…The report stated that "A rapid and uncontrolled growth in the use of material resources should be avoided, unless the social structure is otherwise substantially changed." Moreover, it was

[11] Act of 17 June 1966 No.12, Relating to National Insurance

> recognized early on that the large revenues from the petroleum sector are not income in the normal sense, but to a large degree involve the extraction of a non-renewable resources. Accordingly, to ensure long-term balance in the economy, it was important to limit the use of state oil revenues. (p. 9)

In addition to implementing restrictions on domestic spending, the 1973 report "implied that, at times, it would be necessary to invest some of the revenues from the petroleum sector outside Norway" (MPE, 2011, p. 9). The thinking was "to transfer resources from the bottom of the sea to international financial markets" to "protect the economy from boom-and-bust cycles" (Austvik, 2012, p. 327). The path towards accomplishing this goal would emerge as the state adapted existing organizational structures for government social security investments over the next fifteen years.

Until 1990, much of the petroleum sector revenue was used to pay off national debts and fund the annual government budget (MPE, 2011). Oil and gas production had risen steadily since the Bratelli report but global prices continued to fluctuate, much of the oil money had been spent on expanding the national welfare system, and a recession was on the horizon. Amidst these rising concerns with the "macroeconomic and social long-term" implications of their petroleum sector revenue boom, Storting established the State Petroleum Fund (the Fund) to invest the money outside of Norway[12] by passing the Government Petroleum Fund Act in 1990.[13] Since inception, the Fund has been overseen

[12] The Fund consists of state petroleum revenues from licensing fees, taxes on companies, Statoil dividends, and the SDFI.
[13] Act of 22 June 1990 No. 36, Relating to the Government Petroleum Fund

by the Ministry of Finance and managed by Norges Bank, the central bank of Norway.[14] The ministry has worked with Norges Bank to develop core strategies for investing the Fund that reflect these values and have broad support from Storting, who are considered political representatives of the Fund's owners—the Norwegian people (MoF, 2011). These values are professionalism, accountability, and transparency (Eriksen, 2006).

Overall, the MoF (2011) "wants to ensure that the…Fund is the best managed fund in the world" (p. 10). This goal depends on a "long-term horizon" for investing Norway's petroleum wealth, grounded in "responsible investment practices that promote good corporate governance and take social and environmental factors into account, in accordance with international best practice" (MoF, 2011, p. 14). According to these investment strategies, the Fund needs to be managed aggressively enough to produce long-term revenues, but also with enough "temperance" as to avoid inflation and overspending (Englund, 2008). After 1990, the Fund's value continued to grow steadily and when global oil prices rose sharply in 2001, Storting established a new regulation for domestic spending: only four percent of the total value should be used for Norway's annual budget.

Known as "the four-percent rule" (*handlingsregelen*), this "self-imposed" regulation stipulates, "the government can use the real return [four percent] of the oil fund…to cover the 'non-oil' deficit in the national budget" (Englund, 2008). Any additional capital gains over the annual four percent are designated for Fund investments.

[14] Reiche (2010) explains that profits from oil and gas activities are invested in the Petroleum Fund, "which includes the difference between revenue (such as taxes and dividends from energy-producing companies, some of which the state receives) and the expenses of the state's oil and natural gas transactions" (p. 3571).

Although this rule is often debated in national politics—some political parties believe more of the funds returns should be used for state-funded projects such as transportation and infrastructure development—this emphasis on "sustainable development" is considered fundamental to the long-term success of Norway's sovereign wealth and realizing "a qualitatively better society that protects individuals and delivers inter-generational solidarity" (MoF, 2011, p. 9). In addition to implementing the four-percent rule in 2001, the state also reevaluated the macroeconomic perspective of the Fund; the structures of society had changed since its inception and "international" now had a broader meaning.[15]

According to Reiche (2010), "in the late 1990s Norwegian civil society introduced the notion that the 'sovereign wealth fund and ethics' theme had yet another facet: what will concretely be produced with the reserved money? Does it contribute to the spread of values in the Scandinavian state, or does it work against them?" (p. 3571). As owners of the Fund, the public believed the oil money should be invested not only toward building a qualitatively better Norwegian society, but also a global society. In response to this growing sentiment, a 2004 Royal Decree[16] called for the formation of the Council on Ethics, a committee tasked with establishing and monitoring principles for investing the Fund's assets.

---

[15] A small amount of the Fund's assets were—and still are today—in the Government Pension Fund-Norway (GPFN), which invests in Norwegian and other Scandinavian businesses. However, since 2007, almost 95 percent of assets have been directed to the Government Pension Fund-Global (GPFG), which invests completely in overseas businesses to avoid over-stimulating the domestic economy (Reiche, 2010).
[16] Royal Decree 19 November 2004

The Council produced a report entitled *Ethical Guidelines for the Petroleum Fund*, which was formally issued by the MoF later that year. These guidelines were based on a premise that state investments should not "contribute to unethical acts, such as violations of fundamental humanitarian principles, serious violations of human rights, gross corruption, or severe environmental degradation" (Englund, 2008). As the only country with such regulations for a sovereign wealth fund,[17] with these guidelines, communicating to Norwegian citizens and the world a strong belief that oil money can be invested ethically *and* profitably.

Commandments One and Seven outlined guidelines for developing organizational structures for centralized control and administration of the Norwegian petroleum sector based on core values such as tradition, temperance, transparency, solidarity, and sustainability. These same values have guided the government in enacting Commandment Three and developing new petroleum-related business activity to avoid Dutch Disease. Commandments Four and Five build on this activity, illustrating two more important contexts of Norwegian tradition: fishing and environmentalism.

Developing a Considerate & Protective Industry: Commandments Four & Five

Commandment Four: That the development of an oil industry must take place with necessary consideration for existing commercial activity, as well as protection of nature and the environment.

Commandment Five: That flaring of exploitable gas on the Norwegian Continental Shelf must only be allowed in limited test periods.

[17] Other countries, such as Saudi Arabia, manage their sovereign wealth funds according to Islamic law, but Norway is the only one to implement this type of secular ethical guidelines (Reiche, 2010).

In this larger narrative, the government has recognized the salience of Norwegian cultural heritage throughout its resource management history while also attempting to merge past and present for the future. On one hand, Commandment Four reflects a reverence for that heritage by considering the continental shelf's surrounding environment and a historic maritime industries; Commandment Five similarly reflects the environmentalism so central to Norway's culture. On the other hand, these commandments provide further illustration of how cultural traditions are continuously evolving in the context of a new national expertise.

The Coexistence Principle

Before oil and gas took over the government's industrial focus, other maritime industries such as commercial fishing and shipping were cultural and economic traditions in Norwegian society. In the context of Commandment Four, the government stipulates that "a fundamental precondition for the petroleum activities is coexistence between the oil industry and other users of the sea and land areas which the petroleum activities will impact" (MPE & NPD, 2012, p. 35). According to Solveig Strand (2002), former Parliamentary secretary for the Ministry of Fisheries (now the Ministry of Fishing and Coastal Affairs), the petroleum sector has affected the fishing industry in two ways: (1) restricting "fishing operations because of its physical structures, like platforms, pipelines and cables;" and (2) discharging "harmful substances" into the water that "may in the worst case reduce the productivity of the sea and thereby what we can harvest from it."

These issues may seem straightforward, but achieving the government's goal of coexistence between the Norwegian petroleum and fishing industries as outlined by

Commandment Four has not been easy. Strand (2002) explains that "right from the start it has been a challenge to ensure that these activities could take place alongside the traditional use of the sea, the fisheries, and without negatively affecting the marine resource base, the environment and consumer safety."

Recall the long-standing Storting debates regarding organizational division of industrial and environmental/safety interests that resulted in splitting the Norwegian Petroleum Directorate and Petroleum Safety Authority in 2003. Similarly, coexistence between the petroleum sector and other continental shelf stakeholders, as well as surrounding natural ecosystems, has been a controversial subject for decades. One of the most influential policies relating to coexistence, The Petroleum Act of 1996, addresses what the government considers "consideration for existing commercial activity" and "protection of nature and the environment" in this context. Section 10.1 of the act, "Requirements of Prudent Petroleum Activity," explains that activities "shall be conducted in a prudent manner and in accordance with applicable legislation…[and] take due account of the safety of personnel, the environment and of the financial values which the facilities and vessels represent, including also operational availability" (p. 22). More specifically, to be considered "prudent," petroleum activities:

> Must not unnecessarily or to an unreasonable extent impede or obstruct shipping, fishing, aviation or other activities, or cause damage or threat of damage to pipelines, cables or other subsea facilities. All reasonable precautions shall be taken to prevent damage to animal life and vegetation in the sea, relics of the past on the sea bed and to prevent pollution and littering of the seabed, its subsoil, the sea, the atmosphere or onshore. (p. 22)

The act stipulates that any operator violating these regulations may be subject to financial or criminal penalty, as well as liable for any destruction to fisheries or marine life.

To avoid the need for such loss and damage, however, the government now relies on "management plans," or "guidelines for carrying out comprehensive management" and facilitating "value creation through sustainable use of resources and ecosystem services" in "Norwegian maritime areas" (MPE & NPD, 2012, p. 35). *Facts 2012*, an annual joint report between the NPD and MPE about the petroleum sector, explains that management plans "establish framework conditions that balance the interests of the fishery industry, the petroleum industry and the shipping industry, while simultaneously ensuring consideration for the environment" (p. 35). A primary component of comprehensive management plans requires impact assessments before major activity:

> Before opening up a new area for petroleum activities, developing a discovery or closing down a field, Norwegian law requires an impact assessment. The assessment describes the possible environmental, social and economic effects that the planned activity could have, including its potential impact on fisheries. The impact assessment is circulated for comment to among others the fishing industry, relevant central and local government bodies and other interested parties such as environmental organizations. This public consultation process is important for identifying the measures that will have to be taken to minimize potential conflicts of interest between the petroleum industry, fisheries and environmental considerations. (Strand, 2002)

As further sections will elucidate, impact assessments are part of a larger trend towards knowledge-based policy making in the Norwegian petroleum sector. These frameworks have been especially salient as the government moves north in search of more resources.

Becoming a Global Environmental Leader

During the past two decades, the government has steadily promoted increased petroleum activity in northern Norway. Later in this chapter, northern activity will be discussed in detail, but it is also important in the context of Commandments Four and Five. Technological expertise in the petroleum sector stemming from a history of maritime industries is a recurring theme in this narrative; it also serves as justification for expanding petroleum activity in environmentally sensitive and traditional fishing regions such as the Barents Sea. Put differently, although the Norwegian government and oil industry acknowledge the commercial and environmental risks of developing these regions, many in the government believe that Norwegian expertise will be able to mitigate long-term damage.

For example, "flaring" is common in the international oil industry, but Commandment Five restricted this practice on the Norwegian continental shelf from the start. The Petroleum Act requires that "burning of gas in flares beyond what is necessary to ensure normal operations is not permitted without approval from the Ministry of Petroleum and Energy (MPE & NPD, 2012, p. 54). According to Ole Anders Lindseth, a current Director General at the MPE, "very much of the technology [for] production without the flaring of gas, for instance, has been developed in Norway or for the North Sea. Because of the [environmental] conditions, but also, for instance, we don't accept the flaring of gas. That again is a cost factor and a technical challenge, because you have to re-inject the gas. We simply don't want that emission" (O. A. Lindseth, personal communication, July 10, 2010). In addition to innovating environmentally responsible

petroleum technologies, the government considers itself a pioneer for regulatory ecologism.

Kristoffersen and Young (2010) argue that the 1970s and 1980s constituted an era of "environmentalism of the state" where government leaders pushed for stricter domestic regulations (p. 579). The Ministry of the Environment (MoE) was established in 1972 and tasked with domestic environmental protection; it was the first ministry of its kind in the world. Regulatory policies were implemented to curb carbon emissions and pollution, both from the petroleum sector and Norwegian society as a whole. Prominent leaders such as former prime minister Gro Harlem Brundtland also brought international attention to Norway's environmental policies. While serving as Chair of the UN World Committee on Environment and Development in 1987, she published *Our Common Future*, also known as the Brundtland Report, calling for global cooperation in finding a path towards sustainable development.

This report also illustrates the government's increasing emphasis on influencing international policies for reducing climate change. In 1990, Norway was one of the first countries to implement a carbon tax.[18] As an ardent supporter of the Kyoto Protocol, "Norway has an emissions target which entails that the country's average emissions of greenhouse gases for the years 2008-2012 shall not increase more than one per cent compared with the emissions level in 1990" (MPE & NPD, 2012, p. 53). Furthermore, *White Paper No. 34 (2006-2007)*, *Norwegian climate policy* argues the government

[18] Act 21 December 1990 No. 72, Relating to Tax Discharge of CO_2 in the Petroleum Activities on the Continental Shelf, later amended by Act 27 June 2008 No. 58

should "exceed the Kyoto goal by ten percentage points" (MPE & NPD, 2012, p. 53). Such proclamations illustrate how in addition to maintaining a thriving petroleum sector, the Norwegian government increasingly considers how it can be an environmental leader for energy-producing nations worldwide.

Developing a State Petroleum Industry: Commandments Six & Eight

Commandment Six: That petroleum from the Norwegian Continental Shelf must, as a main rule, be landed in Norway, with the exception of special cases in which socio-political considerations warrant a different solution.

Commandment Eight: That a state-owned oil company be established to safeguard the State's commercial interests, and to pursue expedient cooperation with domestic and foreign oil stakeholders.

In terms of Commandments One and Seven, 1972 was an important year for the Norwegian petroleum sector; Storting established the Norwegian Petroleum Directorate in Stavanger to facilitate government control over the regulatory and administrative functions of NCS development. On June 14, 1972 Storting also made an important decision to fulfill the commandments by establishing the Norwegian State Oil Company, or Statoil. With Statoil, the Norwegian state shifted its focus from being a landlord—renting or leasing their oil fields to foreign companies—to being an entrepreneur building their own international political and economic petroleum capital on the continental shelf.

A Two-Part Strategy

Looking back on the major events in company history, a 2012 Statoil report entitled *40 Years of Amazement* traces this strategy from the beginning. According to the

report, on September 18, 1972, Statoil was incorporated as a limited liability company and held its first general meeting:

> The protocol from the meeting spans for 6 pages and lays out some of the basic aspects of the company—including the establishment of Stavanger as Statoil's headquarters. It also states the company's total share capital of NOK 5 million, which is split into 50,000 shares worth NOK 100 each. The next day, summons were already issued for Statoil's first board meeting on 5 October in Oslo. While the company was now underway, it still had quite a bit of growing to do. At the beginning of 1973, Statoil had a grand total of two employees. This rose to 54 employees by the end of the year, and again to 118 employees by the end of 1974.

This "growing up" was facilitated by a two-part government strategy. First, Statoil was granted a fifty percent stake in every developed field on the NCS *after* discovery without running the risks or costs of exploration (Gordon & Stenvoll, 2006). Commandment Six supported this "success at no cost" strategy by requiring NCS petroleum to be landed in Norway. Thus, the state created an organizational vehicle for managing its stake in developing essential export infrastructure such as a gas pipeline system to Germany and the United Kingdom (Gordon & Stenvoll, 2006, p. 23).

The second part of the government's strategy included transferring the technological knowledge and expertise from experienced international companies to Statoil. In addition to building up infrastructure, the fifty percent stake meant that Statoil could observe these companies as they explored and developed NCS petroleum while still creating an inviting and competitive business environment. According to Lerøen, (2010), "competition on the NCS ensured the participation of the world's leading technology

specialists" (p. 13). As *Ocean Viking* and *Normand Prosper* illustrated, international oil companies brought much-needed experience and resources to developing the continental shelf, but also relied on Norwegian expertise to successfully overcome North Sea conditions. This same spirit of cooperation and competition would be necessary to transition Statoil from an infant company to international leader.

To facilitate this exchange, Statoil (2012) explains the government "put forth technology agreements into place with foreign oil companies during the fourth NCS licensing round in 1979. Their funding and expertise helped not only to ensure that the international companies made more petroleum research investments in Norway, but also to transfer know-how to Norwegian research and industry, including us." One of the company's most important fields, Statfjord, illustrates how this strategy paid off. Statoil was a partner in the field when development started in 1979 and took over production in 1987. Not only have Statfjord production figures "been huge, the field has been just as significant for us in terms of learning lessons as an operator and of developing and utilising new technology" (Statoil, 2012). For example, based on Commandment Six, the field would need a new system for transporting natural gas from the North Sea to Norwegian land, and then back out for export (Lerøen, 2010). However, this system would have to cross through the nearly-1200-meters-deep Norwegian Trench, and foreign companies were hesitant. According to Statoil (2012),

> The scepticism was so great when we unveiled our concept for the Statpipe gas transport system to connect Statfjord and Gullfaks with continental European markets that no other companies went along with it. Given just 14 days to present

> a development proposal to the Norwegian government, the master plan for the Kårstø gas plant was constructed out of matchboxes on a large piece of cardboard … and approved. Construction of Statpipe started in 1982 and the 880-kilometre system opened three years later.

The Statpipe system was the first to cross the Norwegian Trench and successfully pipe gas to Kårstø just north of Stavanger. Furthermore, this narrative theme—an underdog beating the odds with hard work and innovation—is reflected throughout the Ten Oil Commandments success story.

Transitioning to a New Structure of State Ownership

Many doubted the continental shelf's potential when Phillips first set out on the *Ocean Viking*, but when a 1973 OPEC embargo caused global oil prices to skyrocket, the North Sea "between Norway and Britain became the single largest site for oil investment and extraction efforts in the world" (Kristoffersen & Young, 2010, p. 578; Yergin, 1991). In addition to taking advantage of infrastructure development and technology transfer from foreign oil companies flocking North, the fifty percent share on existing fields meant Statoil earnings were soon exceeding even the greatest expectations. In fact, Statoil was so successful that by the 1980s, the company's profits were almost as high as Norway's entire GDP. However, political unease with Statoil's wealth was mounting; many worried the company's burgeoning power could violate the first and most important commandment of centralized state control over the petroleum sector (Austvik, 2012). The government wanted to protect domestic and international competition on the NCS and Statoil was becoming too big to manage.

Until 1984, the MPE regulated all state licensing regulation, including the fifty percent share of production licenses awarded to Statoil, and the Ministry of Finance collected all taxation income. To meet growing concerns and further safeguard tax income, the state again reorganized its petroleum sector investments in January 1985 with *White Paper No. 33 (1984-1985) Concerning the effect of the reorganisation of the State's participation in the petroleum industry*, splitting them between Statoil and the newly established State's Direct Financial Interest (SDFI). Under this arrangement, the state pays "a share of all investments and operating costs in projects on the NCS" that corresponds to "its direct financial interest in the SDFI portfolio" (MPE, 2012). These projects include on and offshore resources and infrastructure, and each "government take" is determined on a case-by-case basis when production licenses are awarded (MPE, 2010a). Then, "on the same terms as the other owners, the government then receives a matching share of revenues from the sale of production and other income sources" (MPE, 2012). The SDFI budget is annually approved by Storting and included in the central government budget.

The net cash flow from the SDFI was envisioned as yet another "predictable, long term and secure revenue to the Norwegian State" (MPE, 2012). As another important step toward that security, in 2001, Storting approved the sale of 21.5 percent of the SDFI portfolio, with 15 percent going to Statoil. That same year, the company was listed on the Oslo and New York stock exchanges "and now operates on the same terms as every other player on the NCS" (NPD, 2012); with this final move, the state had successfully privatized Statoil. Also in 2001, the government established Petoro, a limited company to

manage the state exploration and production licenses on the NCS. As with the SDFI, Storting appropriates Petoro's annual budget and all revenues are filtered back into the central government (MPE, 2010b).

As with Commandments One and Seven, Commandments Six and Eight were designed to ensure that Norway not only reaped the benefits of administrating state petroleum activity, but also became a major player on its own continental shelf. By balancing its central control, administrative, and business roles to create and manage Statoil, the SDFI, and Petoro, the state has leveraged profits not only to offset the costs of their own investments in the Norwegian petroleum sector, but to also net substantial sovereign wealth.

Developing the High North: Commandment Nine

Commandment Nine: That an activity plan must be adopted for the area north of the 62nd parallel which satisfies the unique socio-political factors associated with that part of the country.

The original Royal Decree and Ten Oil Commandments were based on a cultural history of state resource management. Following in the footsteps of nineteenth-century hydropower legislation, these policies communicated a long-term strategy for establishing Norwegian sovereignty and control over the petroleum on their continental shelf. At the same time, the government espoused a strong commitment to considering existing commercial activity and environmental constraints in the regions targeted for development. According to this narrative, the same approach has applied to developing the Northern regions above the 62nd parallel.

When the commandments were established in 1971, petroleum activity was concentrated in the southern and western regions of the North Sea, but these areas of the NCS contained only a fraction of the potential oil and gas lying in Norwegian waters. Now, the government predicts that nearly sixty percent of undiscovered petroleum resources remain below the surface in Arctic waters (NPD, 2012). These areas are often referred to as the "High North." Kristoffersen and Young (2010) explain how this term came into being during the early stages of the Norway Model:

> Knut Frydelund, the former Minister of Foreign Affairs, introduced the term "high-north" to describe the Barents region in 1973. It has since been recognized as a politicized term that does not refer to a clearly geographically demarcated area but works to establish Norway's sovereign rights and interests in the Arctic region, including the Barents Sea…[and] has increasingly been talked about as the "land of possibilities." (p. 581)

Developing the High North would require long-term planning and implementation. According to Lerøen (2010), the government interpreted "socio-political concerns" in Commandment Nine as "both domestic and foreign-policy concerns" (p. 13). In terms of foreign policy, establishing and maintaining Norwegian sovereignty over the continental shelf was, and remains today, a top priority. During the 1960s, that meant delineating maritime borders with the countries that shared parts of the North Sea: Denmark, Sweden, and the United Kingdom. North of the 62nd parallel, the NCS contains both additional petroleum resources and more complicated geopolitical and environmental development concerns. These concerns have also been the focus of continued domestic debates about the High North for nearly forty years.

Prior to 1980 when the government first opened the Barents Sea for exploratory drilling, everything north of the 62nd parallel was considered too much of an environmental and economic risk to develop. But the government has always planned to develop northern Norway to be developed after the North Sea was depleted (Knol, 2010). Thirty years ago, much of this region was a virtually one big sheet of ice, inaccessible to rigs, ships, or any development infrastructure. However, since 1987, global warming has melted these icy waters at an increasingly rapid pace. Figure 10 (Norwegian Ministry of the Environment, 2011) illustrates the extent of polar sea ice in coverage 2010 (green shading) compared to the extent from 1979 to 2000 (orange line).

Figure 10: *Extent of Polar Sea Ice Coverage in 2010 and 1979-2000*

In the last thirty years, the previously inaccessible Northwest Passage has become "a viable transportation route" for Arctic petroleum activity (Harsem, et al., 2011, p. 8037). However, extreme weather and environmental sensibility make developing these regions unpredictable and dangerous. These concerns lie at the heart of many domestic controversies surrounding Arctic development; many environmental and safety advocates challenge the notion that existing infrastructure and rig technologies can handle a major disaster. Furthermore, increased shipping traffic could disrupt or destroy the many fragile ecosystems relying on the Barents Sea.

As consistently seen throughout this metanarrative, the government's strategy for implementing Commandment Nine is based on a historical-cultural background of Norwegian values stemming back well before the Barents Sea was opened in 1980. In fact, resource exploration above the 62nd parallel can be traced back hundreds of years to the Svalbard island region in the Arctic Ocean.

Out to the Cold Edge

Svalbard, which loosely translates to "cold edge," is an archipelago region halfway between Norway and the North Pole (see Figure 11) (U.S. CIA, 2013). Now an important mining, tourism, and research location, the islands have served as Arctic fishing, whaling, and hunting stations since at least the sixteenth century. Svalbard was terra nullius—a no man's land—until 1920 when the Spitsbergen Treaty formally established Norwegian sovereignty over the territory. The 1925 Svalbard Act[19] expanded the Treaty's provisions; rather than simply being considered a demilitarized and free-

[19] Act of 17 July 1925 No. 11

economic zone, Svalbard would now fall under the provision of Norwegian laws and regulations. Rolf Einar Fife (2013), current Director General of Legal Affairs with the Ministry of Foreign Affairs, explains the historical context for these international agreements:

> In 1871 Norway and Sweden invited a number of States to express their views on a possible Norwegian annexation of the archipelago. Most responded that they had no objection, while Russia expressed reservations…Fully independent from Sweden since 1905, Norway invited Russia and Sweden, and then other States, to successive conferences in Kristiania (Oslo) in 1910, 1912 and 1914. These explored the possibility of establishing a joint administration of the archipelago to respond to regulatory and policing needs related to prospective coal mining activities…the proposals made at the Kristiania conferences met with opposition and were deemed unfeasible. Furthermore, World War I brought these discussions to an end. After the war, it was again Norway that took the initiative to achieve a definitive resolution by bringing the issue before the 1919 Peace Conference in Paris…A key explanation had to do with the casualties suffered by Norway, in spite of its neutrality…The major powers felt that they had "a debt of gratitude" for the Norwegian sacrifices, and expressed sympathy with the Norwegian arguments put forward at the conference.

Much like hydropower legislation influenced the Ten Oil Commandments, Norway's history as a peaceful country has influenced its approach to establishing sovereignty over territories such as Svalbard. Furthermore, this approach is consistent with a comprehensive, long-term strategy for developing a national petroleum sector that respects its surrounding environment.

Figure 11. *Svalbard and Surrounding Regions*

In addition to annexing Svalbard to Norway, the 1925 legislation dealt with protecting the "pristine natural environment" and "fragile ecosystems in these Arctic areas" with "prudent policies" (Fife, 2013). Much of the archipelago is closed to any economic activity and successive government policies "have moreover defined the protection of Svalbard's distinctive wilderness character as one of several overriding

policy objectives" to ensure "one of the world's best managed wilderness areas" (Fife, 2013). For example, Stoting passed the Svalbard Environmental Protection Act[20] in 2001 to "preserve a virtually untouched environment in Svalbard with respect to continuous areas of wilderness, landscape, flora, fauna and cultural heritage." In a 2002 press release, former Minister of the Environment Børge Brend said this act fulfilled a moral and legal obligation to protect a "national treasure" in Norway.

Ash Lad & Snow White

Statoil discovered the Askeladd natural gas field in 1981 (Emmerson, 2010). The field's name comes from a character in *Norske Folkeeventyr*, a compendium of classic Norwegian folk tales by Peter Christen Asbjørnsen and Jørgen Moe. Askeladden (Ash Lad) is the youngest and smallest of three brothers; in many of these tales, he defies all odds to triumph where many others have failed. Fittingly, Statoil discovered the Snøhvit (Snow White) field[21] in 1984 when it was still a government corporation.

Snøhvit was the first gas discovery in the Barents Sea to be developed (Statoil, 2012b) and the first field in Europe to yield natural gas (NPD, 2012). Although these fields have been important to Norwegian petroleum activity since the early 1980s, as with the North Sea, the environmental challenges of developing this region were vast.

[20] Act of 15 June 2001 No. 79, Relating to the Protection of the Environment in Svalbard

[21] This name is also used to refer to a larger development comprised of the Snøhvit, Askeladd, and Albatross fields.

Figure 12. *Snøvit Development in Northern Norway*

As illustrated by Figure 12 (Statoil, 2012b), the development lies outside of Hammerfest on the 70th parallel. The Gulf Stream winds keeps surrounding waters free from ice, but still present challenges like winter storms.

In addition to still being a major gas producer, Snøhvit is one of the most important developments for the Norwegian petroleum sector because of the technological challenges and successes associated with its extracting and transporting resources. For example, according to Statoil (2012b), Snøhvit "took a long time to become commercial…[and] involved multiphase flow transport over a longer distance than had ever been attempted before. When it came on stream in 2007, Snøhvit was the first NCS field operated entirely by remote control from land, and includes Europe's first gas liquefaction plant." Figure 13 (Statoil, 2012b) illustrates the new LNG plant, on the shores of Hammerfest, operated by Statoil.

Figure 13. *Snøvit LNG Plant*

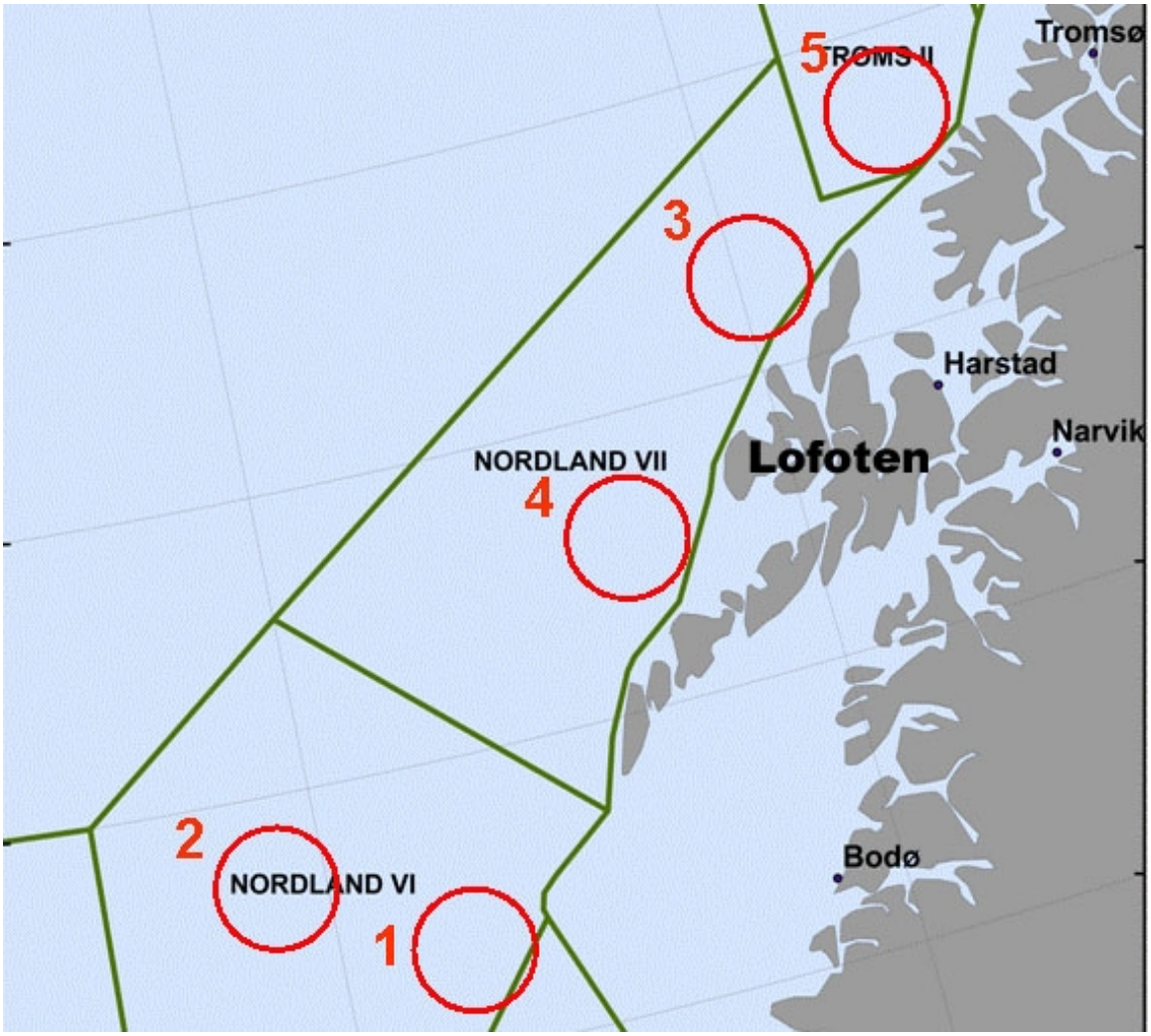
In keeping with the folk symbolism of its namesake, Snøhvit represents the future potential of expanded northern petroleum activity; despite the environmental risks of these Arctic waters, the Norwegian petroleum sector can persevere.

LoVe: Prospective Acreage for Sustainable Activity

As oil production on the NCS has experienced steady decline since 2009, a new host of domestic concerns have emerged about Norway's petroleum sector. One of the most controversial domestic debates involves the island regions of Lofoten and Vesterålen (LoVe), an area steeped in Norwegian cultural significance and environmental diversity. The government has considered LoVe "prospective acreage" for exploration and development during the 1970s, but then decided to focus on the North Sea

(Kristoffersen & Young, 2010, p. 578). Since then, different government administrations have essentially kicked the can down the road on opening LoVe for oil and gas activity, calling for more exploratory studies and environmental impact assessments to appease a divided national electorate. Figure 14 locates the regions targeted for development in LoVe and surrounding areas based on NPD's 2009 estimates (*Barents Observer*).

Figure 14. *Lofoten Regions Targeted for Development*



As spawning grounds for the world's largest cod and herring populations, LoVe is known for breathtaking beauty and a historic fishing industry, making it a popular tourist destination for Norwegians and world travelers alike. Because of the environmental constraints of this region, drilling would have to occur closer to the shore than previously permitted by Norwegian authorities. Not only would an oil spill have a better chance of reaching shorelines and causing long-term damage to Lofoten's fish stocks, some local residents decry the idea of oil rigs and transport ships cluttering their awe-inspiring vistas. However, this area also represents a potential wealth of subsea petroleum. For these reasons, the LoVe issue really heated up when Prime Minister Kjell Magne Bondevik took office for his second term:

> In 2002, a full moratorium on oil and gas activity in the Norwegian part of the Barents Sea was put in place due to environmental constraints, which lasted three years. This moratorium was a direct consequence of the political statement of the Bondevik government in 2001. This declaration stated that the Barents Sea would not be opened for new petroleum activity before a comprehensive impact study of year-round petroleum activity in the Barents Sea was carried out. The declaration committed the government to a proactive environmental and resources policy based on the principle of sustainable development, which prioritizes research and development. Furthermore the declaration stated that the government should establish an integrated management plan for the Barents Sea, in which environmental, fisheries, petroleum, and maritime transport considerations are valued comprehensively. This announced a leading role for the Ministry of the Environment, which was assigned the task to head the process towards integrated management of the Barents Sea. (Knol, 2010, p. 253)

Storting formalized this "principle of sustainable development" in *White Paper No. 12 (2001-2002), Protecting the riches of the sea*, emphasizing the primary goal of an integrated management plan for the Barents Sea should "contribute to consensus about the management of the marine areas between sector interests, local, regional, and national authorities, environmental organizations, and other interest groups" (Knol, 2010, p. 253). In other words, the management plan was to be a vehicle for intra-organizational negotiations on balancing environmental and economic interests in the Barents Sea.

Soria Moria: Economic, Environmental, & Political Security

The government's focus on High North development once again shifted when Prime Minister Jens Stoltenberg was reelected in 2005 as leader of a three-part ruling coalition between the Labour, Socialist Left, and Centre parties. After their September victory, coalition leaders met at the Soria Moria Hotel in Oslo to negotiate the focus and goals of their term. The resulting "Soria Moria Declaration" avowed to uphold "Norwegian economic, environmental and political security interests in the North shall have a high priority and be considered as closely related" (Kristoffersen & Young, 2010, p. 581). The hotel name and declaration title are taken from another classic Norwegian folk tale in Asbjørnsen and Moe's *Norske Folkeeventyr*, "Soria Moria Castle." The story's protagonist, Halgor, is a poor young boy who rises from humble beginnings—much like Ash Lad—to discover the Soria Moria castle and find true love with its princess. His journey is one of solidarity and triumph, as no clear path to the castle exists and many challenges arise along the way.

As a result of the Soria Moria Declaration, in 2005, the Ministry of the Environment published the *Barents Sea Management Plan.* Drawing from the Ministry's statements in a September 2006 Norwegian newspaper, Kristoffersen and Young (2010) argue this integrated management plan for the Barents Sea and LoVe "is closely connected to this strategy [Soria Moria] as it posits Norway as the 'best resource manager in the North by supporting petroleum development that satisfies strict environmental regulation'…[and] will 'form the foundation for a long-term and environmentally responsible economic growth from petroleum development" in the High North (p. 581).

That same year, Jonas Garr Støre, former head of the Ministry of Foreign Affairs, announced the Stoltenberg government's High North strategy would focus on three main issues: (1) settling the Russian delineation conflict; (2) building the case for Norwegian sovereignty in the North, and (3) increasing LoVe petroleum activity (Dale, 2011). Støre spoke of a "new chapter in the North" (Kristoffersen & Young, 2010, p. 581) and in 2006, the MFA published *The Norwegian Government's High North Strategy* to solidify these foreign policy goals.

A central factor in accomplishing the third goal was actually determining how much petroleum is actually contained in the LoVe region. From 2007 to 2009, the government sponsored a series of seismic studies to determine LoVe's actual petroleum value. Originally thought to hold two million barrels of oil, the studies determined the waters are more likely to contain 1.3 million barrels (Moska & Fouche, 2010) . NPD (2010) estimates the potential net value of these future oil and gas resources at approximately 500 billion NOK (approximately $86 trillion USD). During this time,

Bondevik's moratorium on opening new areas was extended from until 2010 when an updated *Barents Sea Management Plan* was to be published. However, in the wake of the April Deepwater Horizon disaster in the Gulf of Mexico, Norwegian officials again placed this decision on hold, calling for more risk assessments, scientific research, and public hearings. Prime Minister Jens Stoltenberg announced in early 2013 that any decisions about LoVe petroleum activity would wait until after the fall national elections.

It's a Cooperation, Not a Race

Another important development relating to Commandment Nine occurred in 2010, when after forty years of dispute, Norway and Russia agreed on a demarcation deal for the Barents Sea and Arctic Ocean. This was not the first border agreement between these nations; Russia conceded to Norwegian sovereignty over Svalbard in 1925, while Norway conceded to Russian sovereignty over the Franz Josef Land island region in 1926 (Fife, 2013). Some forty-five years and Russian governments later in 1970, Norway again initiated border discussions regarding the remaining shared continental shelf areas. Based on the United Nations Law of the Sea, Norway argued the boundary should be drawn along an equidistant midline between the two countries, but Russia argued for a "meridian line boundary running more or less straight north from the mainland, which would have provided it with an additional 67,000 square miles of economic territory—about equal to the entire Norwegian sector of the North Sea" (Gibbs, 2010). Russian seismic surveys in the 1980s determined this disputed area was rich with mineral deposits, but more recent assessments estimate almost 6.8 billion tons of oil and gas lie beneath these waters (Amos, 2011).

Figure 15. *Norwegian Maritime Borders with Russia*

The maritime borders were finally resolved in April 2010 (see Figure 15) with a joint announcement by the Norwegian prime minister and Russian president Dmitry Medvedev in Oslo:

> Stoltenberg said it showed good will in the face of rising international anxiety over who controls the Arctic seabed, which by some estimates contains a quarter of the world's undiscovered fossil fuels. "This is a confirmation that Norway and Russia, two large polar nations, do not have a policy about racing, but a policy about cooperation," he said. When Russian scientists planted a flag on the seabed at the North Pole in 2007, it seemed that a "race to the Arctic" was on, with northern nations aggressively jostling for the right to exploit resources that were previously out of reach. (Gibbs, 2010)

The formal treaty was unanimously approved by Storting in April 2011[22] and split the disputed area nearly in half, although Russia's territory likely contains more petroleum deposits. As with previous border negotiations, the deal signaled an important milestone for Norway in establishing sovereign rights over Arctic territories using cooperation instead of aggression. Furthermore, as illustrated by Stoltenberg's comments, this agreement set an example for other countries "racing" North in search of oil and gas.

Developing Foreign Policy: Commandment Ten

Commandment Ten: That Norwegian petroleum discoveries could present new tasks to Norway's foreign policy.

The tenth and final commandment can be interpreted on several levels. First and foremost, foreign policy is an integral aspect of the Norway Model. However, the more nuanced interpretation lies in the simple and straightforward, yet ambiguous, language of the commandment; "new tasks" related to "petroleum discoveries" could involve just about anything at anytime. Put differently, this commandment leaves the door open for interpreting other commandments based on the emergent nature of Norwegian petroleum activity in a global energy landscape.

As the previous section discussed, the current government's High North strategy is certainly important because of the aforementioned global interest in Arctic petroleum, but it also illustrates the overwhelming nature of three current and future challenges of adapting the Norway Model: (1) maintaining a balance of power with foreign actors; (2)

[22] Treaty between the Kingdom of Norway and the Russian Federation concerning Maritime Delimitation and Cooperation in the Barents Sea and Arctic Ocean

factoring environmental impacts of petroleum activity into a comprehensive strategy; and (3) recognizing the oil belongs to all Norwegians. In addition, climate change has pushed environmental issues to the global stage of energy policy. These factors mean that Norway is now, more than ever, part of a worldwide network of decision-making for both business and regulatory issues.

More specifically, the NPD (2012) stresses that continuing to find undiscovered resources in Arctic, as well as making a gradual transition from producing oil to gas, is vital to maintaining Norway's vision for the future. Natural gas consumption is expected to rise considerably in the European Union by 2030, and with the increased energy needs of emerging countries like China and India, overall global natural gas consumption is projected to rise by fifty percent in the same amount of time (Harsem, et al., 2011). The most recent U.S. Geological Survey predicts that almost 25 percent of the world's undiscovered petroleum resources are contained in the Arctic, with 80 percent of that oil and gas lying beneath ocean floors (Lindholt & Glomsrød, 2012). The majority of those resources—a total of 41 percent of all oil and 70 percent of all gas—are located in Russia (Lindholt & Glomsrød, 2012).

However, Russian political climates and infrastructure capabilities have proven unreliable many times in the past, and despite their current government's focus on Arctic petroleum activity. Conversely, as the third largest exporter and fifth largest producer of natural gas in the world, Norway is considered one of Europe's most important and reliable energy sources (Reiche, 2010). By 2013, gas production is expected to

compromise over half of Norwegian petroleum activity and will continue to grow over the next decades (MPE, 2011).

In the beginning of this oil and gas fairytale, foreign policy related to petroleum activity focused on establishing and building Norwegian sovereignty on the NCS with both foreign oil companies and neighboring countries. Today, the focus on sovereignty over the NCS remains the same, but the context has shifted. From this perspective, Commandment Ten illustrates the cornerstone of the state's current and future management strategy: government policies and organizational structures should promote new oil and gas discoveries and maximize existing outputs if the Norwegian petroleum sector is to benefit the whole nation.

Chapter Summary

The success story of the Ten Oil Commandments describes how the Norwegian state, by implementing incremental regulatory and organizational changes to the way it manages petroleum resources, has been able to blend its long-term, comprehensive goals as a social and political entrepreneur with the shorter-term, profit-maximizing goals of a private business. The state has certainly taken on more risks with such entrepreneurial roles, but clear values rooted in cultural history and outlined by the Ten Oil Commandments, comprehensive regulatory planning like the NPD and taxation system, and smart investments like Statoil have come together with symphonic precision; Norway's oil industry went from infant to world leader in under twenty years.

Overall, this metanarrative describes how different events, especially when framed around public policies, punctuate the plotlines of the Norwegian success story.

Every story has a conflict though, and in the Ten Oil Commandments, the conflict is finding a way to keep the success going. In modern Norway, this conflict represents a latent tension between the government's continued focus on the oil and gas fairytale and a growing push for opening a new chapter on sustainable energy development.

Chapter Five: A New Chapter for the North

> Realising the potential of the Arctic will not be easy. The dilemmas related to increased economic activity in the High North must be carefully thought through…But we are on the right path. Petroleum and marine resources in the High North will help provide a foundation for our future prosperity, and we remain determined to preserve the unique Arctic environment. Finally, let us remember that the legal and political frameworks needed to maintain the Arctic as a region of peaceful coexistence.
>
> *Norwegian Minister of Foreign Affairs Jonas Gate Støre, September 21, 2012*

The metanarrative presented in Chapter Three describes how different events punctuate the plotlines of the Norwegian success story. The conflict of this narrative lies in keeping the oil and gas fairytale going; the resolution lies in finding and developing all available petroleum resources—especially those in the North—with same spirit of regulatory and technological innovation that got Norway this far. In 2006, Foreign Minister Jonas Garr Støre called for a "new chapter in the North" for the Norwegian petroleum sector (Kristoffersen & Young, 2010, p. 581). In addition to settling the Russian maritime border and building Norwegian sovereignty in the Arctic, the Stoltenberg government believed that writing this new chapter depended on promoting Barents Sea and LoVe development.

However, as Browning and Morris (2012) state, "narrative realities are contingent and local…competing narratives and interpretations [can] coexist…and there may and often are different versions of the truth" (p. 154). And while most Norwegians would concur the petroleum sector has benefited their nation, not everyone agrees that more oil

and gas development is the way forward. In these contingent interpretations, the "conflict" of the Norwegian success story also centers on the future of petroleum activity in the North, but is told a bit differently each time. Norway is surely at a crossroads, but there is more at stake than petroleum; the very values that define the Norwegian success story—consensus, transparency, and environmentalism—hang in the balance.

Thus, this chapter will explore alternate perspectives on developing the High North set against the backdrop of my fieldwork experiences and interview data. The leader of a grassroots anti-petroleum organization explains why many locals in LoVe, and a growing number of Norwegians throughout the country, are questioning the government's motives for discovering new oil and gas in the North. The founder of an influential Oslo environmental NGO recalls how the local movement got its start when fisherman found their voices. The leader of that local movement explains how their organization has brought local voices to the national policymaking stage. The former national leader of the Socialist Left party and current managing director of World Wildlife Norway build their stories on how LoVe development is symbolic of a larger global initiative towards sustainable energies and economies. Often quoted together in media stories, these organizational leaders offer provocative perspectives on the local, national, and international implications of continuing the Norwegian oil and gas fairytale.

Folkefest: A Weekend of Local Stories

In July 2010, I interviewed Frederic Hauge, the leader of Bellona Foundation, an influential environmental think tank headquartered in Oslo. Hauge told me of a growing grassroots movement against Lofoten oil drilling and how Bellona was helping local

fisherman organize legal and protest actions. He mentioned one organization in particular, *Folkeaksjonen oljefritt Lofoten, Vesterålen, og Senja*, (People's Action Against Oil Drilling in Lofoten, Vesterålen, and Senja), that was leading the local cause and gaining national support. Hauge put me in touch with the head of People's Action (PA), Gaute Wahl, who invited me to see his organization in action the very next weekend; PA was sponsoring *Folkefest*, a huge anti-oil protest in Svolvær, a historic fishing village in the Lofoten Island region.

This would not be my first time to LoVe; I spent a week in Henninngsvær, one of the region's smaller islands, for a qualitative research camp the previous summer. We stayed at a locally owned rorbu, ate traditional Northern cuisine like rehydrated stockfish and potatoes, watched fisherman unloading a whale on the rorbu pier, and soaked in a traditional wooden hot tub after hiking Austvågøya. Just one year later when I returned for Folkefest, I saw a different view of LoVe. My friend and research partner, a UiN doctoral student, had come along to help me with Norwegian translations and conduct her own fieldwork at the protest. We were staying in Svolvær, a 5000-person town located in the Vågan municipality of Nordland County. Tourism is increasingly one of LoVe's most important industries and the shiny new waterfront hotels, restaurants, and gift shops I saw were striking departure from the town's thousand-year-old cod fishing roots. After we settled into the Thon Hotel—one of many in a popular national chain—a five-kilometer taxi ride took us to Kabelvåg to interview Gaute Wahl.

With just 1600 residents, Kabelvåg is a smaller and more traditional Vågan village than Svolvær. Most of the protesters were bunking up at the historic Vågan

Church, also known as the Lofoten Cathedral, but much of the weekend activities were happening at Prastengbrygga, the village watering hole (*brygga* means pier in Norwegian) where we were meeting Wahl. As we sat down at sunny pier-side table, Wahl explained how he got involved at the beginning of People's Action in 2007 and "immersed" himself in the cause as the group began gaining media attention. For the next year, *Lofoten Aksjonen*—as it was called until 2009—concentrated on establishing "more formal cooperation with environmental organizations like Friends of the Earth, Young Friends of the Earth, WWF, and Bellona." Together with these NGO partners, Wahl recounted, "we had this big conference in Svolvær the autumn of 2008, which was very broadly represented both from Vesterålen and Lofoten and the environmental organizations." It was there and then that "we decided that we wanted to make a national organization, a people's campaign."

At first, Wahl split his time between working for the organization and teaching at a local elementary school. "None of us imagined that it would take off the way it did," he explains, "but this was the most debated political issue all of last year." In January 2009, PA hosted a foundation meeting in Svolvær that Wahl says turned out to be "one of the most visited political meetings since the 1970s," and by 2010, with nearly 4,000 registered members from all over Norway, the PA board could afford to hire him as a fulltime leader. Since then, Wahl has become a "major figure in the national debates about petroleum development" (Kristoffersen & Young, 2010, p. 582).

After the interview, Gaute went back to running the protest logistics and we treated ourselves to a well-earned pint. At a nearby table, I overheard two people

speaking in American English and couldn't help but introduce myself. Dave, a marine biologist from Alaska, was in town to speak about his experiences cleaning up a 2006 Prudhoe Bay oil spill. His visit was sponsored by World Wildlife Norway (WWFN), which is where his travel companion, Mali, also worked as a marine biologist. They invited us to their table and soon our group of four became thirty or forty as more protesters arrived for the weekend festivities. As the evening wore on, we headed to Mali and Dave's rorbu for a *nachspiel* (afterparty) of homemade *fiskesuppe* (fish soup) and sing-alongs with our new friends. We said our goodbyes for the night and Dave mentioned that upon their return to Oslo that coming Monday, he would also be speaking at WWFN headquarters. Since I would also be in Oslo, Mali invited me to participate and interview her boss, Nina Jensen. As luck would have it, I had already scheduled an interview with Nina's sister, the national leader of the pro-oil Progress Party Siv Jensen, that same Monday morning at Storting.

The next day back at Prastengbrygga, the village center had been transformed into a festival-like setting of vendor tents—serving whale burgers, no less—colorful banners, and a large stage for the afternoon's debate over LoVe development. Among the debaters was Ivar Kristiansen (the source of my narrative inspiration), a Storting member from Bodø whom I had interviewed that June in Oslo. As a Conservative Party (H) a representative for Nordland County and member of the parliamentary Standing Committee on Foreign Affairs and Defense, Kristiansen is a strong advocate for the petroleum sector in the North. Also on stage was Kristin Halvorsen, arguably one of the most powerful women in Norwegian national politics over the last decade. As the former

Minister of Finance, current Minister of Education, and leader of the Socialist Left (SV) party, Halvorsen and her party are some of the most vocal opponents of LoVe petroleum development in Norway; I would be sitting down with her the next morning at her rorbu for an interview before heading back to Bodø.

The interview data and field notes I would collect as a result of this trip sparked a much deeper understanding of how the Norwegian oil and gas fairytale is playing out in the High North. Although these organizational leaders believe the petroleum sector has been important for Norwegian success, they are skeptical that government policies and structures for managing the future of natural resources will continue to benefit the whole nation. The government claims that coexistence and knowledge are the way to keep this success story going, but these leaders counter the evidence is crystal clear; Arctic petroleum development is the wrong direction from Norway and its time to write a new chapter for the North.

Coexistence or Crowding Out?

Remember that Commandment Four requires petroleum development to consider existing commercial activity and the surrounding natural environment. According to the government, the Petroleum Act of 1996 and other legislative initiatives have created a regulatory framework for ensuring this coexistence. More recently, with *White Paper No. 12 (2001-2002), Protecting the riches of the sea* the Bondevik government established a more comprehensive framework for "integrated management plans" that promote consensus between stakeholders in new marine areas targeted for development (Knol, 2010). According to former Ministry of Fisheries and Coastal Affairs state secretary

Solveig Strand (2002), because of these management plans, “cooperation between the petroleum and the fishing industries has steadily improved over the years, and is formalized in different ways so as to ensure a good basis for decision-making.” However, not all stakeholders would agree that coexistence between the petroleum sector, fisheries, coastal communities, and the natural environment in the High North has actually worked out the way the government claims (Knol, 2010).

Particularly in LoVe, many political and environmental groups have decried the idea of exploration and drilling, arguing a spill would have disastrous effects on the local economies, cod and herring spawning grounds, seabird colonies, and coral reefs. According to Kristoffersen and Young (2010), “whilst the CEO of the Statoil, Helge Lund, has argued that his company has a ‘democratic right’ to argue for access” in LoVe, local fisherman from have questioned the government’s consideration, raising “concerns about who has a ‘right to the ocean’” (p. 582). Beyond this being a rights issue, the practical “challenges associated with both industries effectively sharing the same territory” were illustrated by controversy over government-sponsored seismic studies during the summers of 2007, 2008, and 2009; “whether the subsequent reduction in fishing catches was due to natural variation or seismic surveys has led to severe political debate” (Kristoffersen & Young, 2010, p. 582). Wahl agrees the oil industry has glossed over local and fishery reactions to encroaching on these waters.

He explains that although the NPD would call this exploratory activity a success, “the fishermen have really gone bananas the last three years when they have been shooting [conducting] seismic [studies].” Furthermore, Wahl believes such government

oversight is part of a larger "politically planned process" with the petroleum sector to dismantle the local fishing industry in LoVe:

> The oil lobby is extremely strong and money powerful, and they have just systematically been like talking down to the fisheries. We have had, you could call it, structuring or rationalization of the fisheries in this area; the small coast fisher with a small boat is about to not exist anymore. That has been a politically planned process. You have [fishing] quotas, and quotas are now for sale, so big companies can now buy up a quota and they can rationalize the fisheries, bigger boats, more income, less work, and that has been harsh on several small communities, especially in this area who have been living on the smaller boats.

Such distrust is rooted in a cultural belief that the oil industry and government are in cahoots to drown out local voices and promote their own economic agendas. I found these comments surprising based on previous interviews and my understanding of the Norway Model; such behavior seemed counterintuitive to the government's official coexistence stance, as well as a seemingly historical-cultural tradition of transparent, consensus-based resource management and policymaking. Still, it was not the first time I had heard of missteps in these democratic legislative processes.

Manufactured Consensus[23]: The Oil Industry's Campaign

Strand (2002) explains government organizations such as the Ministry of Fisheries and Coastal Affairs require a stakeholder review process as part of the impact assessments included with integrated management plans. These reviews and assessments must occur before most major petroleum activities get a government green light:

[23] The term "manufactured consensus" represents a core category interpreted from participants actual words, not to be confused with the theoretical concept advanced by Herman & Chomsky (1988).

> Before opening up a new area for petroleum activities, developing a discovery or closing down a field, Norwegian law requires an impact assessment. The assessment describes the possible environmental, social and economic effects that the planned activity could have, including its potential impact on fisheries. The impact assessment is circulated for comment to among others the fishing industry, relevant central and local government bodies and other interested parties such as environmental organizations. This public consultation process is important for identifying the measures that will have to be taken to minimize potential conflicts of interest between the petroleum industry, fisheries and environmental considerations. (Strand, 2002)

Thus, the government has espoused to uphold the coexistence policy and take all stakeholder interests into consideration. However, when I spoke to Frederic Hauge in June 2010 at his Bellona office in Oslo, he told me a story about the government sidestepping this "public consultation process."

In 2001, Norsk Hydro—a Norwegian energy company that merged with Statoil in 2007—"had got permission to drill at Røst," a Northern municipality in the LoVe region. "Before we could appeal to the Ministry of Environment and demand a formal review of the environmental impacts of new petroleum activity in Røst, Hydro was ready to start drilling," explains Hauge. "And we said, well, this is a lack of democracy and we cannot be arrested" for protesting. Bellona activists "had just been in the Netherlands and got a new boat, and we sailed directly up and stayed at Røst where the platform was on its way," Hauge continues. After Bellona threw out their anchors, effectively haulting the platform installation, "the Labour Party withdrew the [drilling] permission and said 'we see that this is wrong from a democratic point of view.'" In other words, the government

admitted they had hastily granted Norsk Hydro drilling permits without a sufficient public review process, and that more environmental impact assessments were necessary.

"Hydro had to turn around their platform and that cost them 400 million kroners." The Ministry of Petroleum and Oil "got *furious*," says Hauge. In addition to costing Hydro a fortune and ruffling the MPE's feathers by blocking drilling in Røst, Hauge claims that Bellona also changed how petroleum companies do business with the government. This protest action played out right before the September 2001 general elections where the Labour Party ceded power to a coalition government led by Prime minister Kjell Magne Bondevik. As discussed in Chapter Three, Bondevik's government was the first promote holistic management plans for Barents Sea development.

Hauge explains the government "started asking, what is the ship traffic these petroleum activities bring with them, what is the global distillation" of organic air and water pollutants occurring from increased traffic and—perhaps most importantly—"who are the actors" with the most power over Arctic oil and gas decision making in Norway? The oil industry responded by building up their public relations and lobbying efforts. According to Hauge, "if you look at the number of people they [the oil industry] have employed since 2001, to do lobby and communication work, it is incredible."

While promotional campaigns may work in Oslo, according to Hauge, many Northern residents are skeptical, even when it comes to environmental NGOs. "When we come up to Lofoten in our boat, they judge us on our seamanship, if the boat is okay, if we are fanatics, if we eat whale meat, and if we can have a beer together," he explains. That's one reason for his mobile speedboat office and why Bellona has been especially

successful at grassroots efforts where others have failed. Instead of just swooping in with glitzy marketing campaigns and expensive lobbying efforts like Statoil and other petroleum companies, Bellona makes a big effort "to be a part of the daily life, in a way, at Røst, Værøy, Stamsund." Hauge explains that Statoil "has the big luxury dinners with a lot of promises," but they "have, in my opinion, misjudged the local attitude completely. It works for a while," until the people realize "there is no second dinner."

Wahl agrees that LoVe locals aren't persuaded by such communication strategies. When I ask him to reflect on Hauge's characterization of the oil and gas lobby, he recounts a specific story about an industry PR stunt that didn't take:

> After the parliamentary elections in the autumn last year, the two political parties with the [strongest] offensive [against drilling] in Lofoten, Vesterålen, and Senja were the ones that got the most cut in in their votes. That [loss] was used for what it was worth by the oil industry, and just some weeks after they had the OLF, the oil industry union's [annual] meeting. They had a big meeting with the scene that had landscape from Lofoten [in the backdrop] but it was in Oslo. It looked like this artificial bird twittering and like the environmentalists or something. It was just a lot of propaganda, like coexistence has never been a problem. This is totally wrong…they are saying to us, you know, a lot of things that are not true, but it's a political fight.

Now, the locals are not afraid to put up their own political fight. For example, when the Ministry of Fisheries and Coastal Affairs decided to open up a Værøy harbor for exploratory activity in 2009, the fishermen mobilized some 70 to 80 boats to block it. This time, Hauge recalls, "it was the fishermen themselves" who organized the protest. Bellona has passed the torch for a direct action movement to local grassroots groups like

PA; now the NGO focuses on providing resources such as expert testimony for legal proceedings and regulatory hearings that local stakeholders could not otherwise afford.

Territorial—not Holistic—Management

Based on these stories, one has to question if the government actually has promoted integrated management plans in the spirit of coexistence and consensus. Are future in the North developments actually being planned with consideration for existing commercial activity and the surrounding environment, as stipulated by Commandment Four? Or is the government willing to stifle opposition voices via a politically planned process in cahoots with the oil industry? And if so, has the Norwegian success story just been based about finding more oil and gas…at any cost?

Kristoffersen and Young (2010) argue this shift has been gradual, but it no doubt exists. Throughout the 1970s, "environmental security" was an integral aspect of government policymaking because "civil society organizations" pushed hard "for greater monitoring and regulation of environmentally hazardous petroleum activities" (p. 582). As such, "the actively inclusive structures associated with the state in Norway" have, for the most part, "worked to ensure that ecological modernization has remained moderate and centrally coordinated" (p. 582). However, such inclusive structures began to change in the 1980s when "concerns around 'peak oil' and its implications for 'energy security' and social spending created new, more exclusive spaces for collaboration between politicians and oil industry representatives around the turn of the century" (p. 582). As the Norwegian economy increasingly became dependent on the petroleum sector, the

boundary between government and industry interests—especially when it came to environmental issues—became even blurrier.

Thus, although integrated management plans would seem to create a public space for negotiating coexistence between the petroleum sector and other stakeholders, "there has been little interchange between governmental representatives and environmental groups, or even between environmental groups on these issues," which has "enabled the increasing marginalization of environmental actors and discourses from debates over oil drilling in the north of Norway over the last decade" (Kristoffersen & Young, 2010, p. 583). Instead, the trend has turned towards "exclusive spaces" for government-industry collaboration, such as KonKraft. Kristoffersen and Young (2010) explain this "public-private forum" held "quarterly, closed meetings" from 2001 to 2007 "and published several reports" in order to produce "a policy consensus regarding the opening up of new oil fields" in the High North:

> The main area in which the oil industry has been able to strategize with government officials for access to new oil fields is a forum called KonKraft. Although it is not traceable in any government documents or public registers this forum was likely established in 2000 with the objective of developing joint strategies between industry and state representatives to make the Norwegian shelf globally competitive. For the industry that means accessing 'prospective acreage,' primarily the unexplored hydrocarbon deposits in the Barents Sea and Lo-Ve region in particular. KonKraft facilitated a quarterly meeting between oil industry representatives and politicians, chaired by the Minister of Petroleum and Energy, called *Toppledeforum* (top-leader-forum). Meetings took place behind closed

> doors so that participants had the chance to talk freely about sensitive political issues. (pp. 580-581)

These closed-door meetings suggest that while the government was officially promoting "integrated" management strategies for coexistence such as the *Barents Sea Management Plan*, "securing the legitimacy of these policies involved producing new territorial management strategies, which largely excluded complex environmental concerns" (Kristoffersen & Young, 2010, p. 583). In other words, rather than finding ways to promote coexistence, KonKraft—in partnership with the Norwegian government—was solely focused on discovering and exploiting more petroleum resources.

The government tells a different story about their relationship to KonKraft. In a 2011 white paper to Storting entitled *An industry for the future: Norway's petroleum activities*,[24] the Ministry of Petroleum and Energy describes KonKraft as an industry agency whose participants—"trade unions, suppliers and oil companies"—"cooperate on factors that are crucial to the further development of the Norwegian Shelf" (p. 65). One of the most important aspects of this agency "involves directing focus to the oil and gas industry's possibilities and challenges," such as "improved recovery," where "the Ministry believes that KonKraft can make a positive contribution" (p. 65). Based on "its participants and composition," the MPE argues that "KonKraft is well-positioned to establish appropriate follow-up of the various areas where the industry is challenged…to improve recovery…as well as considering if, and potentially how, joint efforts to reduce operating costs on the Norwegian Continental Shelf can be organised" (p. 65). This MPE

[24] Meld. St. 28 (2010-2011) Report to Storting (white paper)

discourse—the only I was able to locate with specific mention of collaboration with KonKraft in English—focuses on improving recovery from existing fields and capitalizing on industry expertise and guidance.

On one hand, this story corresponds to that of the Ten Oil Commandments; such policies, procedures, and organizational partnerships are motivated by the same historic values that Norwegian governments have always embraced for managing their natural resources to benefit the whole nation. If oil is good for Norway, and industry are the experts on oil, then the government is acting in everyone's best interest. On the other hand, the closed-door nature of KonKraft meetings calls in to question a transparent administrative and regulatory process; industry executives themselves have stated "the meetings provided the petroleum industry with a 'detailed context of the Norwegian agenda and the priorities in Norway' …[including] information on upcoming decisions and actions from the government" (Kristoffersen & Young, 2010, p. 583).

The issue is further complicated by a 2008 documentary by the Norwegian Broadcasting Corporation (NRK) revealing "KonKraft had been the major arena for the industry to work towards developing petroleum fields in northern Norway" and "the main bureaucrat in the Ministry of Petroleum and Energy responsible for KonKraft had secret meetings with industry representatives to advise them on how to run an effective lobby campaign" by improving their environmental image and concentrating on influencing mayors in northern Norway and politicians in Parliament" (Kristoffersen & Young, 2010, p. 581). It is not exactly surprising the MPE would want to help oil companies with their communication strategies; after all, the government owns 67 percent of Statoil. However,

the secretive and closed nature of these interactions left a bad taste in many Norwegian citizens' mouths.

North vs. South: Regional Power Divides

KonKraft is not an isolated example in terms of northern skepticism of the oil industry's motives-or the government's motives, for that matter—when it comes to natural resources. According to Dale (2011), many northern Norwegians see LoVe petroleum development as "yet another example" of how they will be "exploited by the central government and the centralized financial elite. As with the fur trade of the middle ages and the fisheries of the past thousand years, critics in the north see themselves as once again having to succumb to the role as provider of raw materials for others to capitalize on" (p. 171). These "historical preconditions" of distrust, argues Socialist Left (SV) party leader Kristin Halvorsen, have cultivated a Northern identity of exploitation, an "understanding that [those in the North] have the resources, but people down South has been profiting from that."

Interestingly, Halvorsen explains this argument can go both ways. Some of those in favor of opening up the Arctic for more development, like her fellow debate panelist Ivar Kristiansen, have told Oslo to stay out of the way; this is what the North wants. She uses and example from yesterday's debate:

> You heard this representative [Ivar Kristiansen] from the Conservative Party. His main point is that he comes from this region and I come from the South, so I should not come here to tell them what is the right thing to do when it comes to developing oil and gas resources outside in Lofoten and Vesterålen. And this is very important to be aware of with the discussion about the resources up north; it

> has to be processes together with people up north and you have to respect their needs to develop their community…Because it is not possible to make decisions if the majority of people up north thinks this is just another way for the South and Oslo to overrule them.

Despite Kristiansen's accusations, Halvorsen disagrees she is out of touch with what Northerners want, stressing the SV party makes sure to keep "close contact" with its members in these regions to ensure their interests are represented in any national decisions about LoVe development.

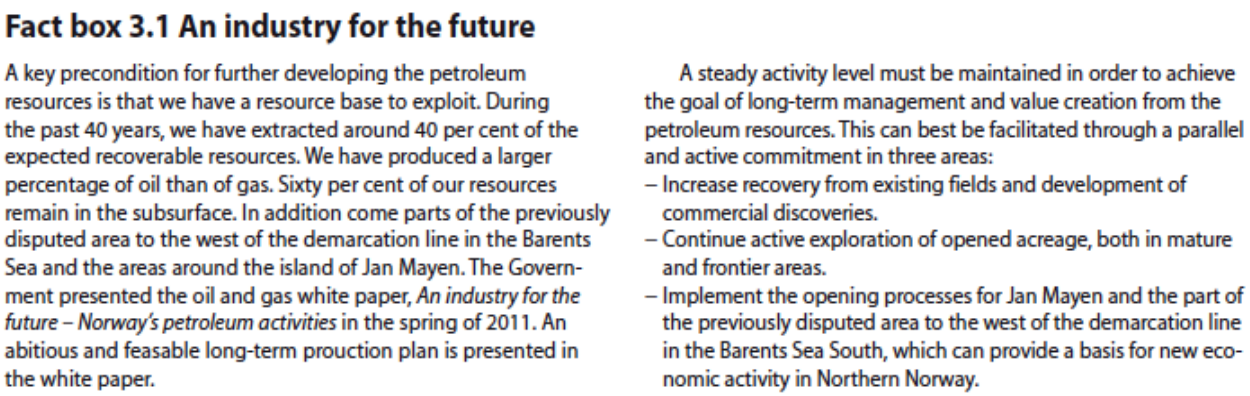
But this argument—that petroleum activity will bring economic and social benefits to local communities simply because it will bring more people to the North—is questionable, Halvorsen argues. Motioning to the clear waters and lush mountains, Halvorsen explains that "those who are in favor of developing oil and gas industry in this area, their argument is [that] the employment connected to fisheries, to tourism—to all the resources that we can see around us now— they will maintain, and employment connected to oil and gas, they will come on top of that." The story of increased economic and social benefits from northern development communicates the petroleum sector won't just coexist with other industries; it will *compliment* them.

An Industry for the Future

This complimentary perspective is central to the government's core strategy for developing multiple aspects of the petroleum sector at the same time. Government organizations like the NPD and MPE increasingly use the phrase "an industry for the future" to describe the Norwegian petroleum sector. In addition to the MPE (2011) white

paper to Storting entitled with the phrase, Figure 16 comes from *Facts 2012*, the annual MPE and NPD joint report.

Figure 16. *An Industry for the Future*



Fact box 3.1 An industry for the future

A key precondition for further developing the petroleum resources is that we have a resource base to exploit. During the past 40 years, we have extracted around 40 per cent of the expected recoverable resources. We have produced a larger percentage of oil than of gas. Sixty per cent of our resources remain in the subsurface. In addition come parts of the previously disputed area to the west of the demarcation line in the Barents Sea and the areas around the island of Jan Mayen. The Government presented the oil and gas white paper, *An industry for the future – Norway's petroleum activities* in the spring of 2011. An abitious and feasable long-term prouction plan is presented in the white paper.

A steady activity level must be maintained in order to achieve the goal of long-term management and value creation from the petroleum resources. This can best be facilitated through a parallel and active commitment in three areas:

– Increase recovery from existing fields and development of commercial discoveries.
– Continue active exploration of opened acreage, both in mature and frontier areas.
– Implement the opening processes for Jan Mayen and the part of the previously disputed area to the west of the demarcation line in the Barents Sea South, which can provide a basis for new economic activity in Northern Norway.

According to this figure, "new economic activity" in the High North will lead the way for "long-term management and value creation from the petroleum resources" (MPE & NPD, 2012, p. 21). The corresponding white paper argues "the Government's petroleum policy is therefore based on a generational perspective" (MPE, 2011, p. 9). From this perspective, developing the North is the key to continuing the Norwegian success story for generations to come.

Ripple Effects

A central component of government and oil industry discourse on High North development deals with the benefits of petroleum activity for local communities. These "ripple effects" of NCS petroleum activity, such as jobs in the supplier industry and regional tax income, are framed as being vital to creating "the largest possible values for the nation" by contributing to local and regional life (Henriksen & Sørnes, 2010; MFA, 2009; NPD, 2012, p. 21). For example, the Snøvit development has been called a

"paradigm shift" for the Hammerfest region in terms of jobs creation and tax revenues (Lerøen, 2010, p. 13). Two reports in particular have emphasized ripple effects in promoting High North petroleum development:

> First, there was the so-called 'Barlindhaug report' (2005). Barlindhaug, a consulting firm located in the city of Tromsø, in the north of Norway, sought to identify the 'extended positive effects' of new oil development. The report was initiated by the previous government's Ministry of Local Government and Regional Development but jointly financed with the petroleum industry. [Second, there was] a report from the private consulting firm ECON on the future scenarios for the north of Norway in 2025. This report, called *2025 Rings in the Water*, projected that by 2025 the 'High North' would be in the 'front seat' of economic development in Norway with 10,000 new jobs created through petroleum activity. (Kristoffersen & Young, 2010, p. 582)

These reports frame petroleum development as a way for the North to reap the economic and political benefits of its own resources; new opportunities could even build the North a Stavanger of its own.

In a more recent report, KonKraft (2009) states the industry believes that "future development of oil and gas activity off northern Norway must be pursued in co-existence and spirit of mutual understanding with important local industries as fishing and tourism" (p. 8). As evidenced by the shiny new hotels lining Svolvær's piers, tourism is thriving in LoVe, and KonKraft (2009) acknowledges "the tourism sector has become an increasingly important contributor to value creation, employment and settlement in northern Norway" (p. 9). However, this report also questions how viable tourism will prove to be in the long-term since "tourist season which only lasts for three to four

months of the year" (p. 9). Pointing to "an overview of guest nights at northern Norwegian hotels and hostels since 2000," KonKraft argues "that vocationally-related demand has been at least as important for industrial value creation as revenues from tourism" (p. 9). In this way, the petroleum sector could add more value to the tourism industry by bringing oil industry employees and stakeholders North year-round.

Similarly, KonKraft (2009) argues that although "the fisheries sector has historically been an important cornerstone for jobs and settlement in northern Norway," that cornerstone has steadily declined over the past twenty years: "since 1990, the number of people in the region with fishing as their main occupation has almost halved and figures for recruitment to the industry look even more dramatic, with a steadily declining proportion of young people choosing work on fishing vessels" (p. 9). The North is experiencing a "brain drain," or a dearth of young people returning home to work after completing their educations elsewhere in the country; the jobs simply aren't there.

As a result, local economies are suffering and populations are steadily declining. In addition, KonKraft (2009) argues that "fewer jobs in fishing have been offset to a great extent by the strong national growth in public sector employment." In other words, the petroleum sector has provided enough jobs in Norway to offset a national economic decline, even if young people are moving to Stavanger or Oslo instead of back home to Tromsø or Lofoten. Petroleum sector jobs are attractive because "the oil industry is knowledge-intensive, with relatively high levels of education and pay" (KonKraft, 2009, p. 9). Thus, more petroleum jobs would encourage population growth by offsetting the declining fishing industry.

However, Wahl relates these lines of reasoning to his previous points about fishing quotas and a "politically-planned process" to promote High North petroleum activity. He explains that "the oil lobby has been saying that now the fisheries are going so badly, so we need another foot to stand on. We need another new industry in this area." The same goes for tourism, Wahl continues, which has "been talked down [about] by the politicians, like it is not a real industry or it doesn't earn any money." But "if you look at Svalbard," says Wahl, "the tourist industry has created enormous local revenue and all those restaurants that are open all year also for locals." Halvorsen also has her doubts. In questioning the legitimacy of these industry projections, she once again ties LoVe petroleum development back into a broader story of southern interests over northern resources:

> I think that we have reports that have been completed recently [that] have underlined our argument and conclusions. The oil industry have estimated that the value of the resources are about double what they actually are—what our research says they are—and that the employment locally connected to development of this area is minor. That is part of what people up north feel. They contribute to the Norwegian economy, but get very little back. This story is the same story… that Oslo develops oil and gas in this part of Norway, [but] that all the revenues, all employment connected to them, are down south in Stavanger, which is even worse than [it going to] Oslo.

And while Halvorsen admits that northern populations are declining, she counters that "everybody knows if you are going to develop communities like this, you need enterprises and activity that are interesting for educated young people." Therein lies the

challenge for her party and others who against High North petroleum activity—how to promote the ripple effects of *other* enterprises.

Peak Oil is Over: Building Sustainable Industries

The oil industry and Norwegian government argue that time is of the essence; they must continue looking for more opportunities now or miss out in the long run. Once a field is discovered, it takes nearly twenty years to start producing. However, Wahl, Halvorsen, and WWFN managing director Nina Jensen also feel time is running out to develop a different kind of national industry. Rather than continuing the oil and gas fairytale, they argue its time for Norway to recognize a new chapter in their success story, as Jensen explains:

> I think everyone agrees that the oil industry has been good for this country and has generated a huge amount of welfare and benefits for the people. I think all environmental NGOs…pretty much everyone we know agrees to that. The point is that we're now at a stage where we need to find a new future for this country... It's not going to be a country where we have enormous wealth generated continuously from oil and gas. It will be something else. We just don't know what that something else will be. We think it should be fisheries, it should be tourism, or it should be agriculture, to say a few. But unless we make sure that we keep these alive and do everything that we can to make sure that it's sustainable, we're pretty much jeopardizing an entire future...We need a new course.

Similarly, Wahl explains that from a different perspective, it's the *temporal* context of the fishing industry's significance that's changing in Norway, not the cultural context. Fishing is a historic industry, but it also represents a different kind of future industry—a sustainable national industry.

In a 2012 interview with *Nature* magazine, Wahl said that "fisheries and fishing have long been the most important foundation for employment and production in this region. Islanders are united against oil and their support of sustainable industries" (Allen, 2012, p. 209). And as Halvorsen explains, the government and oil industry stress that new jobs in the petroleum sector will *add* to those created by existing Northern industries, not replace them. However, she argues that an expanded petroleum sector not only fails to coexist with other industries in the North, but it actually puts them in jeopardy. For example, "the employment connected to tourism, to fisheries, to production of clean food would be threatened if we opened these areas…if an accident happens, it will be a catastrophe. A lot of people up there who have invested in small enterprises will go bankrupt if such catastrophes happen." But it's not just about protecting these investments from accidents and oil spills, says Halvorsen; it's also about ruining unique Northern brands:

> This concept of Lofoten and Vesteralen, the brand, is not like one out of 5,000. It's *one* unique brand. It's a symbol. For instance, there is an enterprise called the Lofoten production. They produce all kind of fish products. They sell because of the name and because people down south and in other parts of Europe connect clean food with their label. And if we start to have drilling around here, their label will suffer…That is the same for tourists. It is not one of 5,000 nice places where you can go. It is unique. The nature is special.

Like Jensen, Wahl and Halvorsen think the government is disregarding the economic and social potential of building industries that *already exist* in LoVe—fishing and tourism—in favor of developing an industry that inevitably cannot last forever.

"It's a matter of what do we do when we run out of oil, because it's only a matter of twenty to fifty years," Jensen argues. "We know the peak oil is over. We know that oil and gas resources are running out. It's only a matter of time, so we need to come up with solutions for the future." Wahl echoes that "the oil is going to last just a couple of decades. That's inevitable for the whole of the world." In order to maintain all viable options for the future Norway must find a more sustainable national industry than oil and gas. In the meantime, the government is wasting time by maintaining a singular focus on the petroleum sector. This is deep and troubling concern for Jensen, one that has consequences not only for the environment, but also to the economic and social welfare of future generations of Norwegians.

She explains the "constant focus on oil and gas as the only solution for this country" is essentially "sending us into doomsday, because once we run out of oil, the petroleum, or the pension fund is going to run out of money in a couple of years paying off welfare and social costs." By then, it will be "too late to start a new business or industries because it takes ten, twenty, thirty years to establish it and make it work." Norway is "so far stuck in the oil and gas ditch that we can't see a way out," Jensen argues, and as a result "we're not investing in our future where time is of the essence; it's right now." Instead, Jensen believes the government should apply the same innovative spirit that built the petroleum sector towards developing a different type of energy resource: renewables.

Rather than having a "back-up plan" or "alternative livelihoods generated from technological capacities or industries…like Brazil or Denmark or even Sweden and

Finland," the government is "spending about 120 times more on fossil fuels than they are in sort of renewables, which is ludicrous," says Jensen. For example, "Denmark made a decision a few years back that they wanted to be energy-independent, so that they're not importing oil any more. They are self-supplied from wind power." In addition to promoting energy independence in the face of declining continental shelf resources, government investments in renewable energy also have the potential for technology transfer to other countries.

Much like Norway learned from foreign companies when they began developing the NCS, Jensen believes "developing industries that can deliver renewable technologies to other countries" represent "a huge potential for technology transfer." And just like the petroleum sector helped Norway build a thriving supplier industry, renewable energy technologies could do the same, according to Jensen. For example, "the offshore wind industry in China could generate something like 70,000 workplaces in Norway, just from supplying the industry." For these reasons, Jensen believes that government investments need to be allocated "at least 50/50" for renewable and traditional energy technologies.

No More Knowledge

In addition to coexistence with other industries, Commandment Four also deals with the petroleum sector's impact on natural environments on the continental shelf and coastal communities. The previous chapter discussed the government's strategy for knowledge-based management planning moving forward. This strategy requires collecting massive amounts of data about the environmental risks of developing the North in order to make informed decisions. However, instead of actually promoting

coexistence, Wahl believes the government knowledge-assessment strategy is just another way to kick the can down the road until the next election cycle. According to Wahl, "The government keeps saying we need more knowledge. What knowledge are you waiting for? We have the knowledge and what does it say? It says these areas are very vulnerable and resourceful and we have problems [for oil to] coexist between the fisheries. We know this, so what's going to be the answer? We need no more knowledge." Overall, he says, they know what they need to make a final decision about High North petroleum development; it's just too risky.

The Science is Crystal Clear: It's Just Too Risky

The government claims that many regions of the Barents, North, and Norwegian Seas are "frontier areas," with "little knowledge of the geology, significant technical challenges and lack of infrastructure" (MPE & NPD, 2012, p. 33). And while "uncertainty surrounding exploration activity is greater here," there is "also the possibility for making major new discoveries" (MPE & NPD, 2012, p. 33). That's why, according to the government, integrated management plans include environmental impact assessments before opening new regions such as the Barents Sea and LoVe. In particular, one series of 2004 reports by WWFN and partially funded by the government, is important to the present discussion (Kristoffersen & Young, 2010). These reports classify the Barents Sea not as an "economic region in Norway's 'high north' but as an 'ecoregion' that crosses state borders" (p. 583); for the first time, the reports present data from Norwegian and Russian environmentalists and biologists on biodiversity from both countries' sides of the Barents Sea. Furthermore, the reports also look "beyond the

impacts of isolated, offshore oil fields, or onshore pipelines to explore wider ecological impacts of oil activities" (Kristoffersen & Young, 2010, p. 583). For example:

> If plans proposed by oil companies are endorsed, the report suggests that shipping in the Barents Sea could increase by up to ten-fold. The coastlines in this region are also among the most hazardous in the world and the sea is strewn with innumerable small islands, skerries, and rocky shallows making it particularly vulnerable to accidents. Chronic pollution problems are already evident due to pollution from Cold War weapons development and illegal dumping of oil in region, and more traffic carrying radioactive waste or other hazardous waste would increase the likelihood of further environmental problems. (p. 583)

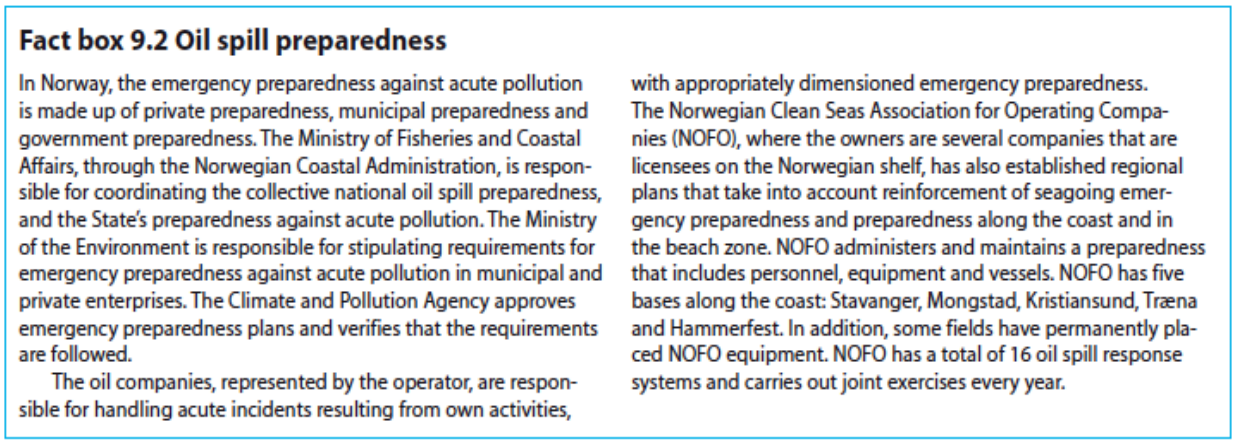
According to Jensen, scientific reports like these prove that "at the end of the day…it's crystal clear. There is absolutely no doubt that these areas should be protected from oil and gas activities…these are the most unique areas in Norway and the Arctic is obviously a hidden treasure chamber…It's just too much of a risk."

That's why environmental organizations like WWFN are "not saying 'no' to all oil and gas development; we're just saying 'no in the most vulnerable and valuable areas and in the areas where the risk is simply too big, because we can't handle dealing with responses if something happened." While the economic and social aspects of coexistence such as ripple effects and renewable technologies are yet to be determined, one thing is clear to Wahl, Halvorsen, and Jensen: Arctic petroleum development will be disastrous to these natural environments.

Not a Chance in Hell: Disaster Preparedness

The government argues these risks can be mitigated. Figure 17, from *Facts 2012*, explains the organizational structures for emergency preparedness (MPE & NPD, 2012, p. 58). According to this figure, local governments, national ministries and agencies, and the oil industry share the responsibilities for preventing and responding to disasters and pollution.

Figure 17. *Oil Spill Preparedness*



Fact box 9.2 Oil spill preparedness

In Norway, the emergency preparedness against acute pollution is made up of private preparedness, municipal preparedness and government preparedness. The Ministry of Fisheries and Coastal Affairs, through the Norwegian Coastal Administration, is responsible for coordinating the collective national oil spill preparedness, and the State's preparedness against acute pollution. The Ministry of the Environment is responsible for stipulating requirements for emergency preparedness against acute pollution in municipal and private enterprises. The Climate and Pollution Agency approves emergency preparedness plans and verifies that the requirements are followed.

The oil companies, represented by the operator, are responsible for handling acute incidents resulting from own activities, with appropriately dimensioned emergency preparedness. The Norwegian Clean Seas Association for Operating Companies (NOFO), where the owners are several companies that are licensees on the Norwegian shelf, has also established regional plans that take into account reinforcement of seagoing emergency preparedness and preparedness along the coast and in the beach zone. NOFO administers and maintains a preparedness that includes personnel, equipment and vessels. NOFO has five bases along the coast: Stavanger, Mongstad, Kristiansund, Træna and Hammerfest. In addition, some fields have permanently placed NOFO equipment. NOFO has a total of 16 oil spill response systems and carries out joint exercises every year.

Furthermore, the oil industry insists that in the Barents and LoVe regions, "it will be cautious and responsible in extracting oil and gas…and it rolled out an initiative to develop ways of coping with any accidents" (Schiermeier, 2012, p. 13). As Tim Dodson, executive vice-president of Statoil, told a 2012 conference in Tromsø, "technology will be there to clean it up" (Schiermeier, 2012, p. 13).

But Jensen believes such statements from the government and oil industry "just show their arrogance and their lack of insight into themselves…if you would have an oil and gas accident in these areas, there would be no chance in hell about them ever being

able to clean it up." First of all, "Norway's had lots of accidents and, even though most of them have been minor spills, I think in the past ten or fifteen years, there's been something like 8,000 spills from platforms." In terms of major incidents and "Norway's capacity to respond, a good example would be the Full City oil spill that happened a year ago in the southern part of Norway, outside of Langesund," says Jensen. "About 300 tons of oil was spilled and the cleanup has taken more than a year. It has been the most extensive and expensive cleanup operation in Norway to date, with 250 million Norwegian kroner in estimated costs and there's still oil left in the area."

Jensen concedes that "even though we have one of the world's best oil spill preparedness, and we do have a lot of good equipment," it would be "it's meaningless if you have a huge spill." Furthermore, any major spill in the Arctic would be that much more disastrous because of extreme weather and limited infrastructure. She wonders "how on Earth do they imagine to deal with a spill of the magnitude that we've seen in the Gulf of Mexico where, even now, with the response technology and the manpower…three months of cleaning up and there is still 1,000 times more oil—or a thousand times as much oil than was spilled from the Full City left in the Gulf." Technology *can't* be there to clean it up when "in some of these areas, if you're lucky, people work for maybe five to ten minutes per hour and then you have to take breaks because it's so cold…parts of the area are 24 hour of darkness."

Even with the best equipment, "where would you put 40,000 people to clean up if you had a major blowout in this region? It just wouldn't be possible. You won't have enough manpower and for more than fifty percent of the year, the weather conditions will

be so bad or so difficult that you won't be able to…set out oil spill booms to contain the oil." That's what happened during the Full City spill, Jensen explains. "The weather was rough when this accident happened, but it just goes to show that the equipment doesn't work when the weather is bad." Experts know that "oil spill booms do not work in wave heights more than three meters," but the average height in LoVe and other Northern regions is "two-and-half to three meters. That's not taking into the extreme, which would be every other day. Basically, it doesn't matter if you have millions and millions of booms or lenses; it will not work." Based on the story of what happened with Full City and the Gulf of Mexico, Jensen reasons that too much confidence in technology over nature is not calculated risk; it's reckless decision-making driven by hubris.

Halvorsen relates a similar reaction through the story of her recent travels "as a tourist from New York to Washington to Nashville to Memphis and then to New Orleans." During this trip, she witnessed how Americans responded to a potential tropical storm that paled in comparison to those in High North waters:

> I spent a few days in New Orleans. I think that experience—because that was when they were preparing for Tropical Storm Bonnie, which wasn't a tropical storm, it was a shower—that experience was…connected to the oil catastrophe in Mexican Gulf. They were told to go to the harbors, because they couldn't be in this area when the storm came. And they had to prepare how they should stop collecting all the oil and come back again when the storm was over. And a storm like this, that is normal in this area [the High North] and it is also, most of the part of the winter, it is dark. It is not daylight. It is very cold. So this is a much more vulnerable part to protect if the accident happens.

"What I thought when I left New Orleans," Halvorsen continues, "is that I have to take stress much more how local people who are dependent on the employment connected to tourism, fisheries, will suffer *directly*." Although the government and oil industry in Norway say they can prevent and respond to environmental catastrophes with cutting-edge technologies, Halvorsen says it's just not their risk to take. Coastal communities "will lose their investments, not only maybe their generation's investments, but what their father and grandfather invested." To secure intergenerational justice for all Norwegians, therefore, "we must learn to protect these areas from the oil and gas industry."

LoVe is A Symbolic Struggle

The "tug of war" between pro- and anti-development interests in LoVe petroleum development has been going on for more than twenty years (People's Action, 2011). In many ways, this is a symbolic struggle for maintaining the cultural values of Norway's past while making political decisions for the future. Furthermore, the implications of these decisions will have a greater impact on the global society in a climate-change era. Fifty years from now, Norway will be on the wrong side of history if the government does not stop focusing on the petroleum sector as the only path towards securing intergenerational social, economic, and environmental justice.

Is Nothing Sacred?

On one hand, the government believes these values are reflected by how its management plans and organizational structures have been adapted over time to the emergent challenges of developing a successful petroleum sector. On the other hand,

organizations like Bellona, People's Action, the Socialist Left Party, and World Wildlife Norway believe these management plans and organizational structures are increasingly designed to stifle anti-development voices. Jensen argues the government's management plans for Arctic development represent "a democratic problem, because, in many cases, they're on both sides of the table." She brings up the fact that "67 percent of Statoil is owned by the government," asking "where do you draw the line and who's making the decisions?" Such blurred lines illustrate a troubling shift for Norwegian culture.

"That's why," Jensen explains, "specifically Lofoten and Vesterålen have been chosen" as battlegrounds for local and environmental causes. For WWFN, the LoVe islands are "high-ranking in natural values and high importance in terms of fisheries and renewable livelihoods, like tourism, fisheries, [and] agriculture. We are quite concerned about if nothing is sacred, if even these areas are opened up for developments, where does that leave us? What type of direction is that taking us for the future?" Wahl agrees the struggle in his hometown region is symbolic of a larger national discussion about culture and identity:

> We talk about natural values, but also about the fisherman's protests, the tourism's protests, and also about what, as locals, do we want. What are our hopes for the future? What is the identity of the people living in Lofoten and Vesterålen? Do they want the oil industry and why or why not? It also has something about cultural identity and which values are the most important: the fisheries or oil?

The government would argue that LoVe development is just a new chapter of the petroleum success story that made their country the prosperous, ethical society it is today.

But Wahl disagrees, saying that the Norwegian identity is more than oil and gas. Rather, the culture of Norway is based on a government that serves the will of its people.

Yes, oil and gas have made this country rich, but this cultural identity is more important than money, Wahl continues:

> It is must be the richest of the richest that have a moral responsibility. I think the Norwegian government is maybe the richest government that has ever existed in the world and throughout history. And we have some 100 billion in the oil fund, and more [oil] may be lying out here [in Lofoten waters]. But are we going to take it up in spite of local protests? In spite of all the fisher organizations saying no? In spite of the tourist ministries saying no? Or are we going to say "okay, maybe this area must be one of those where we are not going to take up the oil, because there are so many good reasons for not doing it here.

Despite such good reasons, however, the government is "still considering it, which makes me question what are their motives? I mean, besides money, obviously? What can be driving them?" asks Jensen. She didn't "want to say any names," but argues "there are officials in the Parliament that are consistently disregarding the scientific advice because if they [did consider it] then they wouldn't be able to help make the decisions that they want, which is basically going into the areas."

In addition to local attitudes and scientific knowledge, Jensen claims, "there's also a major opposition amongst the Norwegian people, which keeps shifting, so now their position is more than fifty percent against oil development." This changing sentiment is also symbolic of a larger cultural struggle over fossil fuels and Norway's role as an energy-producing nation in a climate change era.

A War that Can Be Won

Closing the door on LoVe petroleum development represents "a big choice between the fossil future, and the renewable future…that's symbolic," Wahl tells me as we start to wrap up our interview. "We are moving into an age that will have a rise in price of energy, of food, and will have lack of it," he explains. "And the world's climates will be changing and we will have to deal with that. So on a large scale, this is where we are heading, and we need to go in a more renewable direction." In order to "to stake out a new course for the future," Wahl believes Norway must "look for alternative livelihoods, alternative energy sources…[and] get away from the fossil fuel age." Based on their strategic partnerships with national and international environmental NGOs, it's not surprise the fight against climate change is one of PA's top priorities. Within the People's Action movement, "a lot of members that are extremely afraid of climate effect" and see LoVe "one place that Norway would be an example…that shows the world that we need to find another way. We need to have more priority on renewable energy, use our money on something else than drilling for more oil." Thus, Wahl believes the government must start "drawing a line somewhere" as how far Norway will go to get more oil and gas.

When I tell Wahl that other people have told me LoVe drilling is inevitable, he agrees "that a lot of local people here think that this is a hopeless struggle because the oil industry is so powerful [and] if there are billions of dollars in the ground, it's a treasure and it will be. They're going to get it somehow." Although the oil industry had been "lying very low since the BP accident" and PA has been gaining national and international media attention for their campaign, Wahl knows the fight is far from over.

For example, the Stoltenberg government's recent decision to delay LoVe exploration activity is a short-term win. Wahl believes this decision was not motivated by environmental concerns such as climate change.

Rather, he believes the government hopes the "coexistence problem will be solved" in time "when the technology is better." However, this decision was also a symbolic victory because "you see that this is a struggle that can be won." LoVe represents "the most realistic possibility of stopping the oil industry ever in Norway here. And the oil industry usually gets what it wants, so being able to stop them for the 30 to 40 years that we have—because the haste-away began in 1979, the first time they tried to open [Lofoten]—it's been a long process. They haven't won yet. But neither have we."

Chapter Summary

While Commandment Four espouses "coexistence" between petroleum, other industries, and the environment, members and supporters of this organization tell a different story; oil and gas in LoVe would disrupt—and even endanger—their ways of life. The main narrative of Chapter Three, "The Ten Oil Commandments," deals with how Norwegian government organizations have evolved over fifty years to uphold the values professed in a historic policy. This is an ongoing story and the most recently, the conflict to be resolved deals with the numerous cultural, political, and environmental challenges of developing Northern regions of the continental shelf. The narrative in Chapter Four uses this conflict as its starting point, but presents alternative resolutions for the future from different stakeholders.

Chapter Six: Theoretical Implications

> One does well to study the work of trained and gifted writers if one is to understand what it is that makes good stories powerful or compelling.
>
> *Bruner (1986, p. 13)*

In Chapter One, five research questions were proposed from five metaphors for narrative interpretation. The results of my interpretation as presented in Chapters Three and Four reflect the intersections of these five metaphors; both "The Ten Oil Commandments" and "A New Chapter for the North" illustrate that narratology is relevant for examining how the Norway Model has evolved over time, adapted to emergent challenges, and planned for the future. To understand the theoretical implications of studying this Model, let us review the five research questions.

In terms of the open architecture metaphor, I asked what types of organizational stories and communicative applications of narrative are present in this data.

In terms of the narrative mode thought metaphor, I asked which plotlines and temporal contexts are present in these organizational stories.

In terms of the sensemaking metaphor, I asked how organizational stories about resource management policies reflect elements of collective and individual identity.

In terms of the Tamara metaphor, I asked about the multiple voices in these organizational stories and how do their interpretations compare to one another.

In terms of the homo narrans metaphor, I asked how narrative rationality is evaluated and communicated through these organizational stories.

The answers to these five questions are found in a single premise: the Norwegian success story is remarkably consistent over time and across interpretations. Before turning to the types and applications of narrative in High North decision-making, let us examine the theoretical implications of these results. First, the plotlines of these stories all center around Norway's rise to prosperity. This is a country that came from humble roots, as a newly independent nation, to exceed all expectations and transform itself into a happy and health society. Even within the organizations who oppose High North development, everyone can agree that oil and gas has been good for Norway. In fact, the primary rift between the stories in Chapter Three and those in Chapter Four deals not evolving plotlines, but with temporality. That is, in facing the global uncertainties of climate change, organizations and actors in this system have different interpretations of *when* the Norway Model must make its biggest adaptation: shifting from oil and gas to a new national industry.

Second, among the stories of Chapters Three and Four, shared interpretations of cultural identity are reflected in organizational policies and structures. As a retrospective and ongoing means for understanding and action, sensemaking is often employed to interpret failures or breakdowns. And while disasters like the Full City spill or scandals like *KonKraft*, are certainly chapters of the Norwegian success story, the Norway Model has still done better than *any other of its kind* at preventing and learning from these breakdowns; these localized narratives are the exception, not the rule. Specifically, social values rooted in cultural identity—consensus, dialogue, transparency, and innovation—have shaped the Norway Model's inception and adaptation to challenges along the way.

Third, regarding plurivocality, these values have also provided a platform for multiple voices to participate in natural resource decision-making. As previously mentioned, however, the most interesting difference in these voices' interpretations of the Norwegian success story center on the future. Fourth, from a similar perspective, these different interpretations are based on future policies' coherence and fidelity with the cultural narrative of Norwegian oil and gas development. That is, some organizations argue the next chapter of this success story relies on continuing development with the same cultural values mentioned above; others argue future development plans—and reliance on fossil fuels for that matter—break from the narratives traditions of Norway's cultural history.

Following, this chapter explores how interpreting the narratives in Chapters Three and Four through the lens of this theoretical framework focuses our attention on the structural and functional applications of narrative in the Norway Model. And in keeping with the lines of inquiry in Chapter One and methods of Chapter Two, these applications are framed by the core categories and related thematic subcategories of my analysis. Specifically, I present the balancing acts metaphor as a descriptive theme of complexity and control in "The Ten Oil Commandments" and "A New Chapter for the North." As a core category, the balancing act metaphor was inspired by two interview participants with nearly sixty years of combined experience working in some of the most instrumental organizations of the Norway Model.

First, there is Petter Nore, director general of the Norwegian Agency for Development Cooperation (NORAD), member of the UN High Level Group on

Sustainable Energy, and author of *Oil and Class Struggle*. Nore explains that when foreign oil companies came knocking in 1959, the government understood "that it's not necessarily in your own interest just to lie down and be rolled over by the international companies. That it has to be a balancing act...the balancing act is the key to the Norwegian success story." For Nore, the balance lies in managing tensions between government and industry interests so that everyone benefits.

Second, there is former director general of the Ministry of Petroleum and Energy, Tore Sandvold. Currently the chairman of his own energy holdings company, Sandvold also served as a former board chairman of Petoro, the government-owned oil company that has managed state interests on the Norwegian continental shelf since Statoil went public. Sandvold argues the most important element of the Norwegian success story "is how to find a sensible balance…between development, developing these new areas, and also having a concern for both the local and environmental impact." From his perspective, this balancing act also deals with the middle grounds between government and industry, as well as how the government manages tensions between domestic, environmental, and global interests.

Overall, "The Ten Oil Commandments" and "A New Chapter for the North" illustrate the emergent uncertainties and challenges of adapting the Norway Model over time. Petter Nore and Tore Sandvold described these adaptations as balancing acts, or what Merriam Webster defines as "an attempt to cope with several often conflicting factors or situations at the same time." In a nutshell, that is what the Norway Model of natural resource management has done since inception. The entanglements between

economic, political, environmental, and cultural interests in managing the national petroleum sector represents a complex network of actors, policies, and structures related to ensuring that natural resources benefit the whole of the Norwegian people for generations to come. Managing natural resources is really about managing tensions between these interests; the Norway Model is an organizational balancing act.

From this perspective, the model is a complex system of organization and Chapters Three and Four reflect how narrative can be applied towards understanding complexity. More specifically, circumspection narratives—reflective stories about learning from the past to plan for the future—illustrate how narrative structure is used to balance the tensions of complexity and control in the Norway Model. In order to understand these connections, we must first understand the features of complexity and complex systems, as well as the relationships between these concepts and narrative.

Features of Complexity and Narrative

Many aspects of Norwegian culture have been examined thus far in terms of their implications for policy-making, organization, and communication in the Norway Model. But if a different culture had been sitting on top of all this oil, would the success story have turned out the same? When I asked him this question, Petter Nore explains theirs is a success story based on "historic experience, luck, foresight—a combination of all of them. Luck had a lot to do with it. But remember what Jefferson said: 'The more I work, the luckier I am.'" This quote inspires reflection on how all of the moving parts of the Norway Model have aligned through a delicate balance of complexity and control. While

some aspects of the Model are designed to reduce uncertainty, the risks of energy development require necessary and great risk.

Citing Taylor (2000) and Morowitz (2001), Browning and Morris (2012) define complexity as "non-linear relations, driven by small forces that result in the emergence of sudden changes that produce unexpected outcomes" (p. 134). As the "opposite of predictability," complexity "appears as a tension, a contrast to control over people, over their performance, over the mission, over the ways work is completed, or over the technology used to complete the goals of the organization" (p. 135). Within this broader definition, several aspects of complexity are important to this argument and its application to the Norway Model: sensory overload and systematic complexity; structural and dynamical complexity; and integrative complexity.

Sensory Overload & Systematic Complexity

Complex systems emerge from what Johnson (2001) describes as *sensory overload*, where by "stretching the human nervous system to its very extremes, and in the process teaching it a new series of reflexes" (Johnson, 2001, p. 38). For example, during industrial era development in cities such as Manchester, England, populations grew faster than infrastructure could at first sustain. In reaction, this overgrowth led "the way for a complementary series of aesthetic values which develop like a scab around the original wound" (p. 39). Over time, seasoned city dwellers see less of the individual moving parts and more of an Impressionistic painting; amidst all the hustle and bustle, "the noise and senselessness somehow transformed into aesthetic experience" (p. 39). These reflexes are emergent, a "mix of order and anarchy," a chaos veiled in structure (p. 38). Sensory

overload somehow becomes a new interpretive framework in an overstretched city pulsing with reflexive movement and organization.

In Chapter Three, the Norway Model was born out of sensory overload and reflexive organization. When "The Ten Oil Commandments" begins in the late 1950s, Petter Nore explains that "we knew nothing about the oil and gas business…the country was fairly weak…with a weak national bourgeoisie [that] never really had much…but always looked at their own position" and how to protect it "whenever they got into contact with international capital…that kind of reflex is the normal way of doing things you find again fifty years later in the oil and gas sector." This reflexivity—a cultural and political norm in Norwegian government—is reflected by hydropower legislation that established a framework for managing natural resources in the early twentieth century. Norway was a newly independent nation and the government wanted to maintain control of their hydropower sector while also profiting from foreign interests.

To do so, they needed to act both quickly and prudently. The Panic Act of 1906, so named for its passing only one year after Norway ceded from Sweden, gave Norwegian landowners time to assess property values and gauge the implications of selling to international companies. Eleven years later, the Concession Act and Water Regulations Act provided more comprehensive regulatory frameworks that still guide contemporary Norwegian hydropower development. Nore argues that "in many ways, what they did with the oil and gas sector was a reflection of that historic experience. That is an important and interesting element in this story…the attempt to control the hydropower sector." When foreign companies came knocking again fifty years later to

stake their claim on the Norwegian continental shelf, the government knew better than to just sign away national resources before finding out how much they were actually worth.

Nore argues "there is a kind of a historic continuity in the Norwegian way…living up to your historic tradition." Like the era of hydropower legislation, the beginning of national petroleum sector history was a time of rapid decision-making, some confusion, and improvisation. There were relatively few established practices for issuing licenses, regulating and taxing activity, or even naming fields, as illustrated by the history of the Ekofisk name. However, just as they had fifty years before, the government implemented temporary legislative frameworks—later replaced with comprehensive organizational policies and structures—declaring natural resources the property of Norwegian citizens.

In this historical context, the Norway Model was born from sensory overload; the existing system was stretched to its limits and new self-organizing patterns of behavior emerged. In addition to responding to sensory overload, complex systems develop their own "coherent" personalities that self-organize "out of millions of individual decisions, a global order built out of local interaction" (Johnson, 2001, p. 39). This self-organizing feature, argues Johnson, is *systematic complexity*, when the individual parts of a complex system are so intertwined they also function as one network. Like the city of Manchester, the "patterns of human movement and decision-making" in complex systems become visible as "a repeated structure that distinguishes them from the pure noise" of emergent improvisation (p. 40). Tsoukas and Hatch (2001) explain, "systematic behavior is the emergent outcome of multiple chains of interaction. As the level of organization increases, complex systems have the tendency to shift to a new mode of behavior" (p.

989). Put differently, new modes of behavior emerge as new norms when complex systems adapt with self-organization and structural patterns.

In addition, complexity is not linear, and is thus "not directly controllable" (Browning & Morris, 2012, p. 139). These systemic processes of self-organization are not defined in terms of causal relations—*A* plus *B* equals *C*—but rather as an interconnected network of action—*A* creates *B*, *B* creates *C*, and as *C* adapts to *A*, *C* creates *D*. From this perspective, the Norway Model did not directly emerge out of any one decision or action. Similarly, as petroleum activity on the continental shelf exploded from the early 1960s onward, the Norway Model has shifted as the different structures for organizational management adapt over time.

Structural & Dynamical Complexity

In addition to sensory overload and systematic complexity, emergence, self-organization, and non-linearity differentiate two aspects of complexity. *Structural complexity* involves sets of conditions "characterized by numerosity (e.g., the greater the number, the greater the complexity), diversity, and interdependence" (Browning & Morris, 2012, p. 135). Whereas structural complexity deals with these three inherent conditions, *dynamical complexity* describes "the actual process of things changing non-linearly in a structurally complex system" (p. 135). Put differently, dynamical complexity describes processes of non-linear structural change in complex systems.

These aspects of complexity—structural and dynamical—although "vastly different," are "often compounded," explain Browning and Morris (2012) with a hypothetical example: "100 leaders (numerosity) from 100 sovereign nations (diversity),

whose fates are connected, must reach a decision concerning the allocation of scarce resources (interdependent parts). The process of their decision-making is inevitably complex and the result equally uncertain, which is to say, unpredictable" (p. 137). When the possibilities for action are many, and the conditions for decision-making are fluid, so is uncertainty surrounding outcomes.

This uncertainty is particularly salient for organizational decision-making in structurally and dynamically complex systems like the Norway Model, and even more so with growing concerns about climate change. Smil (2003) argues the complexity of modern energy systems is based on "above all on a multitude of uncertainties" concerning the risks of coal, hydrocarbon, nuclear, and renewable energies:

> Some of these concerns have been with us for generations, others are relatively new, and in either case perceptions and interpretations keep shifting with the changes in economic outlook, national and international security, as well as with the emergence of new environmental disruptions. An imminent end of the oil era is a perfect example in the first category while second thoughts about the benign character of renewable energy conversion belong in the second group of concepts. And, to use perhaps the most prominent environmental example, any long-term appraisals of energy prospects will be strongly influenced by changing perceptions concerning the rate and degree of global climate change. (p. 180)

In this description, we see how climate has greatly increased the numerosity and diversity of environmental challenges for global energy production and consumption, as well as the structural interdependence of these factors.

Furthermore, the temporality of these challenges is so dynamic that decision-making structures for managing energy systems barely have time to adapt accordingly.

According to Smil (2003) "our record of looking ahead is very poor even when dealing with relatively orderly systems because their complex dynamics have repeatedly made most of the specific predictions obsolete in a very short time" (p. 317). Such uncertainty can be counterintuitive from an organizational perspective. Browning and Morris (2012) explain that for organizational decision-making, "linear relationships have historically been essential…because one of the basic purposes of organizations is to produce some kind of regularity or dependability in behavior or performance" (p. 137). However, linear structures are not always well suited for dealing with non-linear complications.

Weick and colleagues have studied how high reliability organizations (HROs) like nuclear power plants and firefighting teams rely on complex structural systems of communication to avoid compounding errors that could lead to major catastrophes (e.g., Weick & Sutcliffe, 2001, 2007; Weick, Sutcliffe, & Obstfeld, 2005). These organizations reflect systematic complexity, the self-organizing feature of complex systems where many individual decisions create larger movements of behavior (Johnson, 2001). In addition, HROs in structurally and dynamically complex systems must plan for unpredictable events by creating and adapting organizational structures of decision-making (Browning & Morris, 2012). Within the Norway Model, the oil commandments have shaped government structures for managing HROs—oil and gas companies developing the continental shelf—based on long-term coexistence and collaboration.

However, the complexities of developing Artic regions where disasters would have severe environmental and social consequences are increasingly emergent and non-linear. For this reason, narratives such as "The Ten Oil Commandments" and "A New

Chapter for the North" can provide meaning for action when logico-scientific reasoning fails to capture the nuances of complexity. Bruner (1986) argues "if classificatory schemes provide a science of the concrete, narrative may provide a science of the imagination. At the very least, a reemphasis on temporality may enable us to more directly deal with change, and thereby to make structural and symbolic studies more dynamic" (p. 141). The narratives in Chapters Three and Four illustrate that overall, organizations that recognize and adapt to, rather than overlook or resist, the qualities of their complexity, have a better shot at sustainability.

Integrative Complexity

On one hand, systematic, structural, and dynamical complexity in energy systems like the Norway Model creates uncertainty that is difficult to control. On the other hand, the "essential openness" of a complex system creates "many confining parameters but the realm of what is possible is eventually always larger than people had imagined because surprises—be they natural catastrophes, technical breakthroughs, or social upheavals—keep reshaping human expectations and ambitions" (Smil, 2003). Capitalizing on the possibilities of openness requires *integrative complexity*, "the degree to which thinking and reasoning involve the recognition and integration of multiple perspectives and possibilities and their interrelated contingencies" (Browning, Greene, Sutcliffe, Sitkin, & Obstfeld, 2009, p. 103).

In terms of openness, narratives about organizational decision-making in the Norway Model illustrate many moving parts within this complex system—major and minor characters, planned and unforeseen consequences, material and symbolic conflicts,

political and cultural implications, historical and global contexts, and so on. These moving parts are both emergent and fluid, yet the Norway Model system requires complex structures of organizational management to ensure that oil and gas benefits the whole nation over time. These structures are facilitated by integrative complexity, "focuses on information processing and decision-making—especially on how fixed or flexible the interpretation of information is and how, once interpreted, information is connected to decision-making structures" (Browning, et al. 2009, p. 102).

One example of integrative complexity in the Norway Model is found in Barents Sea integrative management plans. These planning processes involve collecting massive amounts of data from a number of different sources, which is essentially a strategy for managing uncertainty and risk. Sandvold says Barents Sea management has been "a very long process that will continue for quite some time before it can conclude." Although the government has communicated intentions for developing the North for decades, Sandvold believes they have also effectively integrated information from environmental NGOs, fishing unions, and safety regulators into management plans. For example, he says, "before we opened up new areas [in the Barents Sea] we brought in new regulations saying not to drill during the cod-spawning season." Essentially for Sandvold, this integrative approach is about listening to many different organizational stakeholders and using many different information sources; "you will always have different views whether the balance is wide or whether it listens too much to business [but] it is a balancing act and you will never get it 100% correct."

In this way, the balancing act of managing complexity and control in the Norway Model appears paradoxical; it will never be foolproof. Yet Tsoukas & Hatch (2001) argue "if practitioners are to increase their effectiveness in managing paradoxical social systems, they should, as Weick (1979: 261) recommends, 'complicate' themselves…by generating and accommodating multiple inequivalent descriptions" (p. 987). In other words, integratively complex decision-making increases the likelihood practitioners are matching the complexity of their approaches to the complexity of what they are managing (Bruner, 1996; Tsoukas & Hatch, 2001; Weick, 1979). From this perspective, by integrating paradoxical or inequivalent interpretations of the complexity of Barents Sea planning, the government is more effectively managing this system.

Furthermore, "an integratively complex system is both stable enough to remain safe from destabilizing while experimenting to invent systems that create opportunity" (Browning, et al. 2009, p. 102). In Chapter Three, the story of Commandment Eight is a good example of this feature of integrative complexity. The Norway Model is based on balancing the administrative, regulatory, and business aspects of a national petroleum sector. Statoil was created to realize business opportunities for the government on behalf of the Norwegian people. When the company eventually outgrew the system, the government experimented with a series of structural policy changes to maintain control yet remain open enough to maximize economic profits. The same can be said about the way oil money has been invested in the national economy over time to avoid Dutch disease. Since the National Insurance Act of 1967, the government has experimented with

many different organizational and legislative structures for balancing its long-and short-term financial goals, resulting in one of the largest sovereign wealth funds in the world.

Complexity, Narrative Structure, and Interpretation

The previous descriptions of complexity provide justification for conceptualizing the Norway Model as a complex decision-making system of organization. In addition, these dimensions of complexity can be applied to understanding narratives as the structurally and functionally complex forms of communication. The interpretive aspect of narrative is what makes it so ideal for communicating about complexity. As Browning and Morris (2012) explain, "the capacity of narrative to vary in punctuation (when they begin and end), pace (what is the speed and variation between sequences), and participant composition (casts can range from one person, to few, to ensembles) means the narrative is a communicative form that is frequently consistent with organizational complexity" (pp. 140-141). As communicative forms, narratives can reflect systematic, structural, dynamical, and integrative complexity based on an open architecture of interpretive capacities.

To illustrate these capacities, let us return to the example of Manchester's history as "a complicated, multithreaded tale, with many agents interacting over its duration…less a linear narrative and more an interconnected web" (Johnson, 2001, p. 38). There is no *one* objective beginning or end to the story, nor *one* objective plotline; the web can expand or contract based on the narrator. The many threads and agents in narratives provide numerous opportunities for interpretation. In the same way, the stories of Chapters Three and Four represent a complex network of narrators, plotlines,

timelines, and resolutions. Thus, the connections between complexity, narrative structure, and interpretation in these chapters involve ordering, predictability, and plurivocality.

Second-Order Interpretation

Tsoukas and Hatch (2001) argue that understanding the "puzzle of defining the complexity of a system leads directly to concern with description and interpretation and therefore to the issue of second-order complexity" (p. 985). As a communicative form, narratives have the interpretive capacity to describe complexity with simple structure and complex meaning. This logic of description can appear—at least on the surface—rather circular, so ordering is a useful strategy in piecing out the layers of social phenomena and communication in complex systems. From an interpretive perspective, complexity is a second-order phenomenon because it must first be *described* as complex to actually be considered complex. In other words, "the complexity of a system is not an intrinsic property of that system; it is observer-dependent" (Tsoukas & Hatch, 2001, p. 985). Thus, Tsoukas and Hatch (2001) argue the way an observer describes the complexity of a system depends on the complexity of their language. Features such emergence, self-organization, and non-linearity are complex descriptions that provide focus and meaning for understanding how complex systems function.

The observer-dependent nature of complexity, similar to how Weick (1979) defines organization as the outcome of sensemaking, also applies to narrative; a story is not a story until interpreted and described as such. And just as Tsoukas and Hatch (2001) argue there is no apparent consensus on when a system is should be considered complex, there is no consensus on when a story should be regarded as a narrative. From this

perspective, the Norway Model is a narrative because the narrators in this system describe it that way. For example, as I discovered during my first interview, the "oil and gas fairytale" is a term often used to describe this cultural success story. Norwegian families have been found to produce more narrative talk than American families, and this communication is focused on teaching cultural values such as collectivism, homogeneity, and egalitarianism, as well as implicit rules for social interaction (Aukrust & Snow, 1998). As such, describing the Norway Model as an oil and gas fairytale is a way of interpreting how cultural values have influenced successful management planning.

Predictability from Structure

In addition to ordering, the processes of interpreting and communicating about complexity with narrative involve narrative configuration through emplotment (Bruner, 1986; Polkinghorne, 1988, 1991; Ricœur, 1984, 1985). Narrative emplotment allows narrators and audiences temporal contexts for interpreting situational meaning. And in non-linear, complex systems of organization like the Norway Model, emplotment is an element of communicative control. "The Ten Oil Commandments" is essentially a success story and the narrators are proud of what their nation has achieved. The narrator in these stories—a collective voice of government organizations interpreted from archival and interview data—communicates learning from the past to understand make sense of future possibilities. The way these stories are structured creates a temporal context for interpreting their meaning. Similarly, Polkinghorne (1988) argues that by recognizing contextuality, "narratives *exhibit* an explanation instead of demonstrating it" (p. 21). Locating the government's management plans in the historical context of the oil

commandments makes the next stages of Arctic petroleum development part of the Norwegian success story.

This is an ongoing story and most recently, the conflict to be resolved deals with numerous cultural, political, and environmental challenges of developing the High North. The nature of these conflicts is not necessarily new; establishing sovereignty over the continental shelf, maintaining coexistence with the fishing industry and nature, and finding new technologies for overcoming the environmental challenges of these regions have always been challenges to building a thriving national petroleum sector. And based on the previous events punctuating this narrative plotline, the Model has adapted successfully along the way. When Statoil became too powerful, Storting split the state's financial interests and took the company public. When Storting worried about the division of economic and safety interests in the Norwegian Petroleum Directorate, they created the Petroleum Safety Authority. When the public worried their pension fund was financing companies that violate human rights, the state created the Ethical Guidelines. Based on all of these events, why would the success story plot change now?

However, the predictability of narrative structure can also limit interpretive capacity, as "once the causal relations are established and unquestionable in a story, it becomes a rule structure (do this and that will happen), or merely a rule to follow" (Browning & Morris, 2012, p. 138). Bruner (1990) claims "there are no structural differences between fictive and factual narratives, therefore, as their status is negotiated among the narrator, the text, and the listener/reader" (as cited in Czairnawska, 2011, p. 340). Hence, the nature of multiple opportunities and possibilities for interpretation—

which can also be considered threats to predictability—cannot be ignored in narrative complexity.

Plurivocality

Just as the narrative knowledge metaphor calls attention to the subjective nature of describing narrative complexity, the Tamara metaphor draws attention to the subjective meaning of organizational narratives. Boje (1991) defines a storytelling organization as a "collective storytelling system in which the performance of stories is a key part of members' sense-making and a means to allow them to supplement individual memories with institutional memory" (p. 106). The plurivocality of storytelling organizations—the dynamic and emergent co-creation of meaning between narrators and audiences—means that different voices can tell different versions of the same story. In this way, the Norway Model is a storytelling organization and Chapter Four offers insight into how localized memories can be interpreted differently from institutional ones.

Douglas (1986) describes the connections between individual and institutional memory, arguing that "institutions systematically direct individual memory and channel our perceptions into forms compatible with the relations they authorize" (p. 98). Thus, institutions largely determine how collective memories are perceived and remembered; individuals ascribe meaning to events that are labeled as meaningful by the institutions to which they belong. Furthermore, Douglas (1986) argues that institutions "fix processes that are essentially dynamic, they hide their influence, and they rouse our emotions to a standardized pitch on standardized issues…[and] the triumph of institutional thinking is to make the institution completely invisible" (p. 98). Science is one such invisible

institution that influences social thought. Czarniawska (1998) states that "modern institutions, including science, run on fictions, as all institutions always have" (p. 10). This assertion builds on "what Lyotard says about scientific knowledge being legitimized by a metanarrative (of progress) and then disavowing the narrative knowledge of its legitimacy" (Czarniawska, 1998, p. 10). Acknowledging and considering how metanarratives such as "progress" can construct and sustain social institutions such as "science" renders the institutional knowledge they produce more meaningful.

Metanarratives can also have what Roe (1994) describes as "functional value" for decision-making in complex and uncertain policy debates. By analyzing the "warring narratives," or those stories with very different explanations and prescriptions for addressing a policy problem, researchers can construct metanarratives to "reconcile (and transcend) their seeming contradictions…by revealing, or creating, common ground among disputants" (Borins, 2011, pp. 168-169). On one hand, the multiple layers of organization and regulation in the Norway Model are designed to invite plurivocality, as well as structural and dynamical complexity in terms of the numerosity, diversity, and interdependence of stakeholders and decision-making processes involved in petroleum sector development. On the other hand, stories in Chapter Four reveal that not all voices agree the system is successfully adapting to emergent challenges.

Overall, a narrative approach can be used to investigate the motivations behind the creation and distribution of institutional metanarratives. By juxtaposing the localized stories in "A New Chapter for the North" against the institutional metanarrative of "The Ten Oil Commandments," we can understand the relationships between interpretation

and plurivocal meaning in storytelling systems of organization like the Norway Model. In addition to these processes being retrospective and ongoing, the stories from Chapters Three and Four reflect how sensemaking can also be considered from an institutional perspective of collective memory.

Balancing Complexity & Control in Circumspection Narratives

In the narratives of Chapters Three and Four, the balancing acts metaphor illustrates how different tensions of complexity are managed in the Norway Model. Nore and Sandvold describe these tensions in terms of interested parties like environmentalists, the oil industry, the government, locals, and the global community. This balance also has much to do with managing the tension between control and complexity and one way to deal with complexity is by communicating with simplicity. This simplicity of narrative as a communicative form is found in structure, as even complex meaning can be communicated through story by establishing a beginning, middle, and end. And within this broad temporal scope, there are myriad types of narrative, as well as ways that narrative can be applied for understanding.

Thus, we turn our attention to one narrative application for balancing complexity and control in the Norway Model: circumspection. Browning and Morris (2012) state that circumspection narratives "encapsulate" what narrators "took away from the incident, which is often a newfound sense of understanding and capability, but sometimes go on to suggest prudence on the narrator's part about how to approach similar situations that may arise" (p. 147). Chapters Three and Four identify how on both individual and institutional levels, narrative is applied to understand the meaning of events and communicate how

that meaning influenced future action. Within these circumspection narratives, three themes of managing complexity and control emerge: balancing past, present, and future; balancing transparency and collaboration in organizational relationships; and balancing risk and reward in High North development.

Balancing Past, Present, & Future

Browning and Morris (2012) describe circumspection as "reflecting upon what happened in the past, altering understandings about the circumstances of action, and prudently anticipating future events" (p. 15). The stories in Chapter Three communicate that from the beginning, the government has been circumspect in creating and adapting the Norway Model of natural resource management. In addition to historic continuity, within the Norway Model, prudent natural resource management is also based on the political structures of a social democratic government system. In "The Ten Oil Commandments," structures takes shape in the form of government agencies, legislative policies, and integrative management plans. Thus, the circumspection narratives in Chapter Three communicate these structures are based on a cultural and historical tradition of political transparency and consensus grounded in a social democratic system.

Accordingly, Sandvold argues that Norwegian success story is a narrative about balancing "capitalistic forces and regulations and government interventions." In comparing our two countries, he explains that in Norway, "we have a stronger government and they create a stronger regulatory system than you see in the United States, which has to do with the system...in a social democratic system, you have this dual balance." Essentially, this balance deals with managing interests from the oil

industry—which is constantly pushing for more development on a faster timetable—and prudently reflecting on multifaceted implications of moving too quickly.

Looking back, the stories from Chapter Three suggest that legislative and regulatory policies for creating and adapting the organizational structures in the Norway Model have consistently supported social democratic ideals and will continue to do so in the future. "The Ten Oil Commandments" narrative communicates collective values such as managerial transparency, intergenerational justice, and prudence. For example, the state has protected Norway's oil wealth for future generations. After establishing the Ethical Guidelines in 2004, the Petroleum Fund was renamed "The Government Pension Fund" to address concerns with the rising social security costs of an aging Norwegian population and growing number of pensions (Nilsen, 2010). At that time, the Fund was only projected to cover one-third of such future costs, so the state recognized that re-emphasizing intergenerational justice by managing the petroleum wealth wisely and supporting a vibrant economy was vital to the long-term wellbeing of Norwegian citizens (Englund, 2008; MoF, 2011).

However, as Chapter Four illustrates, not all voices in the Norway Model system agree that High North petroleum development is reflecting the socio-political context communicated in "The Ten Oil Commandments." Recall that Nore and Sandvold argue the Norway Model was born out of reflexive experience; social democratic values have shaped how the system responds to emergent concerns adapts over time. Chapter Three paints the current era of High North petroleum activity as the logical next step in the Norwegian success story. Much of this logic is connected to faith that although the

national industrial culture of Norway has changed, important traditions are still being revered. As Weick et al. (2005) explain, the sensemaking process relies on faith, action, evidence, and guesses, but the central cog in this mechanism of understanding is communication—events, organizations, and environments—can actually be "talked into existence" by the stories people tell about them (p. 409). Weick (2009) offers a "synopsis" of this sensemaking experience:

> "Faith" in organizations takes the form of a future perfect presumption that "actions" will have made sense. "Evidence" in organizations typically consists of traces, clues, and fragments that are made sensible by actions that combine cues and "guesses" into meaningful patterns. These are the basic tools we have to construct transient meaning in an unknowable world (p. 27).

A clear example of the sensemaking connection between faith, action, and communication is evident in government stories about coexistence between the petroleum sector, the fishing industry, and the natural environment. In particular, stories about ripple effects illustrate how new oil and gas developments in the North can enact cultural values. Sandvold believes that "if you ask sort of the average mayor along the coast, he says, 'Gosh, I'm one lucky guy, because now I have two legs to stand on, both fish and oil and gas…I don't have all my eggs in one basket." Furthermore, Sanvold reflects there are some "very strong forces within the fishing industry" that have come to "welcome, or at least they tolerate, the oil and gas activities…after 35 years. The responsible bodies within the fisheries communities and organizations see that actually oil and gas and fisheries can coexist on the shelf. It can be done and experience has shown it."

In addition to greater faith in coexistence, Sandvold believes local people and local fisheries in the North are concerned with population decline and brain drain. On a more personal level, these people are saying, "I have my fishing vessel. I'm not sure if my son will be a fisherman. I can live with oil and gas activities, but that may give my son future employment, and he can still stay in his community…Norwegians are not very migrant." Overall, these comments indicate a balance between traditional cultural values and contemporary social and economic concerns. Yet the individual stories in "A New Chapter for the North" do not necessarily communicate that cultural values are shaping the trajectory of High North development. While Commandment Four espouses coexistence, the organizational leaders in Chapter Four believe oil and gas in LoVe would disrupt—even endanger—traditional ways of life.

According to McAdams (2006), "to say that an event marks a 'turning point' in one's life is to suggest that one's life is like a story whose plot changes direction as a result of a particular scene" (p. 75). In both Chapters Three and Four, the High North represents a turning point. Whichever way the story goes, the Arctic will have transformational cultural, economic, and political consequences in Norwegian history. In this way, a new chapter for the North is really a new chapter for Norway.

Balancing Transparency & Collaboration in Organizational Relationships

Chapter Four locates the Norway Model in a temporal context for managing complexity by picking up where Chapter Three ends. This context is laden with tensions between cultural history and a new globalized era for Norway. In this story, LoVe is a symbol for Norwegian values— egalitarianism, consensus, and managerial

transparency—that are being diluted as the Norway Model adapts to High North development. Specifically, the stories in this chapter assert the relationships between government and industry are leading to the detriment of the greater Norwegian people.

Browning and Morris (2012) argue that relationships based on egalitarianism and consensus still experience the turbulence of complexity and control. Since these systems are supposedly designed to promote equity among varying interests, uncertainty abounds as to whether or not "the distribution of resources, whether material or symbolic, are truly democratic" (p. 136). Thus, equity in egalitarian systems is "incredibly fragile and open to change" since "the conditions that established fairness and equity yesterday may not hold true today or tomorrow [and] decisions do not 'stay' made and must be continually reaccomplished to maintain their direction and bearing" (p. 136). This dynamism requires organizational structures in the Norway Model to be adaptive to emergent and non-linear relationships. As such, stories about government and oil industry collaborations are an example of adaptive relationships in a complex system.

Specifically, the story about KonKraft and the Ministry of Petroleum and Energy in "A New Chapter for the North" reflects how circumspection narratives can illustrate the plurivocal nature of complex relationships. In Chapter Four, we learned the MPE has been accused of collaborating with KonKraft to shape public opinion and legislation in favor of High North petroleum development. The closed-door nature of these meetings, limited mention of them in official government documents, and exclusion of local or environmental opponents to High North oil and gas seem contradictory to a plurivocal system espousing transparency and consensus based on social democratic structures of

organization and regulation. Yet despite these tensions in the KonKraf*t* story, Ole Anders Linsdeth, a current director general at the Ministry of Petroleum and Energy, says that his agency has an open-door pragmatic relationship with the oil industry, not a secret back-door arrangement to close the system to opposing voices.

Lindseth argues this relationship structure emerged with his predecessor, Tore Sandvold, who believes if the MPE wants "to take decisions on a basis where all relevant issues are taken into account, you cannot do that through a letter, for instance, from industry. You need to actually sit down with industry in order to learn how industry thinks and what makes industry tick." This perspective reflects structural and dynamical complexity in recognizing the interdependent relationships between government regulators and private oil and gas companies in a nation whose economy is based on a state petroleum sector. According to Lindseth, these meetings are designed to be apolitical to encourage consensus with, not resistance from, from the industry. Thus, inviting organizations like WWFN to the table during these meetings could discourage oil and gas companies from being completely open about their goals.

Furthermore, Lindseth believes that you cannot decide how to create value with political processes; value creation must involve investors, regulators, and commercial interests. In regulating and developing the national petroleum sector, the MPE must know how the oil industry thinks "geologically, technically, and commercially," especially since "provide the activities that lead to value creation and income for the government." For Lindseth, collaboration is the key; industry is a working partner, not the enemy of government: "If we—as they do in many countries—sit in splendid isolation here, I'm not

sure if we get all the relevant facts and all the relevant concerns on the table. That is why I am very occupied with speaking to industry, to have a very open-door policy."

The open-door policy has benefited Norway since they granted Phillips that initial exploration permit. Taxes from foreign oil companies have helped fund the Norwegian welfare state for generations to come, and those same companies built most of the initial infrastructure on the NCS, eventually allowing Norwegian petroleum and supplier companies to flourish. In turn, foreign oil companies have gained a lot from working with state agencies such as the MPE. The story behind the petroleum taxation system is one such incentive; oil and gas companies pay some of the highest tax rates in the world to do business on the Norwegian continental shelf, but they also are assured shared risks and rewards with the government. Moving forward, Lindseth believes government organizations must ask themselves, "How can you give industry the right incentives in order to contribute to making the cake bigger? We will never agree on how to share the cake, but there will be more to both parties if we make the cake bigger."

Balancing Risk & Reward in High North Development

In addition to balancing state interests with those of oil and gas companies, balancing the risks and rewards of petroleum activity has been a central tenant of the Norway Model. More specifically, Chapters Three and Four illustrate awareness that the biggest dangers of petroleum activity are environmental, while the biggest payoffs are economic and social. Such awareness is not unique to developing the Norwegian continental shelf; all natural resource exploitation involves similar risks and rewards.

However, the way this balance has been enacted into policies and organizational structures over time is unique.

From this perspective, Nore believes environmental issues "have been the starting point almost for everything in the High North or Norway." In fact, the way that "Norway has handled how to analyze the environmental impact in the North," with integrative management plans, "that kind of thing is a balancing act between commercial and environmental interests." This balancing act involves deciding "do you want to maximize economic and variables, expecting that present value, or do you want to maximize the social impacts of oil and gas or the triple bottom line?" And moving forward, the tensions between risk and reward—essentially between predictability and uncertainty—only become more complex as petroleum activity expands into the Arctic. This creates perhaps the most complex balancing act for the future of the Norway Model.

"The Ten Oil Commandments" communicates that the government has been open about its intentions for petroleum development in the High North, while still moving forward with prudence based on principles from the oil commandments such as coexistence. Reflecting on this decades-long history, Sandvold believes that most government administrations "have found quite a good balance between going slow in these new areas" by taking environmental and social concerns seriously and implementing "stricter and stronger regulations." For example, the frameworks from The Petroleum Act of 1996 have been adapted for High North development with holistic management plans since the Bondevik placed a hold on LoVe petroleum activity in 2002.

Similarly, Nore explains "how you make a rational decision" in petroleum development decision-making is a complex process, beginning with looking at "the facts…at what's the probability [of a petroleum-related disaster]." Next, you consider how to factor that probability "into your decision-making tools. Is that enough to stop a kind of development when, on the other hand, you have big incomes, you have local spin-offs, and you have industrial development?" Overall, this process is a "balancing act between these two" and in the case of LoVe, "from a pure rational point of view, you should continue to go forward. But this is just one example…there are stacks and stacks of interesting stories to take here." Thus, if the data say it is okay to drill in these areas, then the uncertain risk of disaster is outweighed by the predictable economic rewards.

However, Sandvold recognizes that climate change has introduced a new element of uncertainty in High North decision-making in terms of balancing risks with rewards. He explains that "we are going to be living with this issue for a very, very, very long time, so we cannot…go and just develop, and develop, and develop…[and we] cannot go down the route of conserving and stopping. You have to find a sensible balance between the environmental and economic interests…this could well be the most global conflict issue in the next century…you have to find the balance." The government must ensure the Norway Model is structurally, dynamically, and integratively complex enough to effectively adapt to such emergent uncertainties. The way to accomplish this complexity balance is through circumspection.

Browning and Morris (2012) describe circumspection narratives as those in which actors "take into consideration both what happened and what would have happened had

circumstances been slightly different" (p. 147). In this description, we see another angle of circumspection in the Chapter Four stories. Two narratives in particular—the story of the Full City oil spill from Nina Jensen and Kristin Halvorsen's recounting of a recent visit to New Orleans—are applied to explain how planning cannot mitigate the consequences to environmental and human safety should a Barents Sea disaster occur.

Jensen and Halvorsen's stories predict that if Norway, and the world for that matter, continues down the petroleum road despite a ticking climate change clock, it will soon be too late. To be circumspect is to be watchfully cautious and circumspection narratives are "about saving for a rainy day… learning from experience, taking timely action, not jumping the gun," and other forms of cautious, well-planned, well-considered action (Browning & Morris, 2012, p. 15). Instead of planning for imminent peak oil by restructuring the Norway Model and building new national industries, the narratives in Chapter Four communicate the government is no longer circumspect about its future energy reality.

Furthermore, the stories in Chapter Four question the narrative rationality of decision-making strategies such as integrated management plans for balancing risk and reward in the High North. Fisher (1989) outlines two components of narrative rationality—fidelity and coherence—to evaluate the trustworthiness and reliability of story's message by finding the links between reason, value, and action. In terms of narrative fidelity, the stories in "A New Chapter for the North" communicate that, as Gaute Wahl says, "we need more knowledge." His organization believes that integrative management is just a larger strategy to expand the petroleum sector.

This conclusion is based on scientific findings from environmental NGOs such as World Wildlife Federation Norway and Bellona Foundation. Nina Jensen affirms that these findings contradict what the government presents as scientific knowledge; she believes the "science is crystal clear: these areas should be protected." In these stories, the success story metanarrative is called into question by presenting alternative interpretations of reason, value, and action in High North decision-making.

In terms of narrative coherence, if this success story is to have a happy ending, "A New Chapter for the North" communicates there must be something more left to accomplish for the plot to make sense. As Jensen explains, "everyone can agree that oil has been good for Norway." But just because oil was good for Norway in the past does not mean it will be in the future. Everyone loves a success story with a worthy protagonist; we cheer for the underdogs who overcome adversity and go from rags to riches without sacrificing their core values. Those like the Norwegian folk hero Ash Lad, who use innovative thinking and hard work to get ahead, who never forget where they came from and what matters most, no matter how far they have come. Therefore, to reason what is good for the oil industry is good for Norway does not necessarily mean that more *money* for the oil industry will build a *qualitatively better* Norwegian society. So what then, if not just money, is there left to accomplish?

Limitations & Future Research

Overall, this research presents many theoretical contributions for organizational narratology. In terms of coherence and fidelity, viewing these narratives together presents contradictions in reconciling past and the present traditions with future decisions about

Arctic petroleum development. The narrative mode thought and sensemaking metaphors draws attention to the temporal processes of creating and enacting meaning; past and events are woven into stories about where the Norway Model stands today and where it will go tomorrow. Using the Tamara metaphor as a lens of plurivocal interpretation, the juxtaposition of stories in "The Ten Oil Commandments" and "A New Chapter for the North" highlights the temporal balancing acts of collective and individual sensemaking processes involved with High North decision-making. Furthermore, viewing these stories as circumspection narratives in an open architecture of organizational narratology illustrates interpretive capacity of narratives for complex understanding.

In addition to these contributions, several limitations of this research must also be considered. As with all interpretive, narratological, and case study research, the purpose of this study was not to test existing theory or produce generalizable results. Therefore, it is important to acknowledge this project could not be replicated in a different cultural or temporal context and produce the same findings. More specifically, three limitations to the findings of this study must be acknowledged.

First, Norway is a relatively small country of five million people with a relatively homogenous population. Thus, to conclude the Norway Model is an ideal organizational system that would generalize to other countries would be an overstatement. However, certain plotlines of the Norwegian success story—creating one of the first and largest sovereign wealth funds of its kind, establishing a reputation for environmentally and socially responsible resource management, and maintaining status as a global leader in the fight against climate change—illustrate the heuristic value of these narratives. Other

nations have certainly expressed interested in understanding and adapting various structures of the Norway Model to their own cultures and governments. Therefore, this research offers important lessons about balancing tensions of complexity and control in global energy systems.

Second, all interview data was collected after the 2010 Deepwater Horizon disaster in the Gulf of Mexico, which certainly affected participant responses. Furthermore, the government is scheduled to announce final plans for LoVe development after national elections in September 2013. Accordingly, the metanarrative in Chapter Three and localized stories of Chapter Four could be different if data collection occurred after such a punctuated event in the success story plotline. However, subsequent fieldwork trips and additional data sources enhanced the longitudinal perspective of my interpretations. Triangulating multiple data sources such as the interview data, archival data, and observational field notes I used in this project allows researchers to enhance the validity of theoretical categories (Creswell & Miller, 2000; Lindlof & Taylor, 2010; Maxwell, 2004; Yin, 1999).

Third, I was the primary instrument of interpretation in analyzing and reconstructing these narratives, which naturally raises issues of reliability and validity with their theoretical implications. To maximize these components, I also relied on theoretical triangulation as consistent with the degrees of freedom approach to case study methods (Campbell, 1975). When interpreting theory in projects such as this dissertation, comparing emergent concepts with a broad range of conflicting and similar literature is essential for building internal validity, sharpening generalizability, and improving

concept definition (Eisenhardt, 1989). Theoretical triangulation also allows researchers to remain open to new directions for theoretical development (Creswell & Miller, 2000; Maxwell, 2004). Finally, I utilized thick description (Geertz, 1973) throughout this dissertation to increase the transferability (Guba & Lincoln, 1989) of its theoretical contributions to other research contexts.

In terms of transferability, future research should consider the many ways in which narrative can be applied to understanding and describing this complex organizational system. This project focused on articulating tensions of complexity and control in circumspection narratives, but those are certainly not the only stories that could be interpreted from this data. For example, celebration narratives could be used to make sense of culture and identity as illustrated by the David and Goliath metaphor referenced in Chapter Two. And in keeping with the open architecture metaphor, a unique type of narrative might well be interpreted from this data. Although I primarily describe the Norway Model as a success story, other researchers—using a different theoretical orientation or methodological approach—could offer a more dire and different description of the political, social, environmental, and organizational implications of this metanarrative.

In addition to examining the relevance of narrative communication to the Norway Model, future research should consider how organizational narratology could be applied to studying other complex systems of globalized organization. Just as practitioners must complicate their management approaches enough to match the complexity of the systems they manage, researchers must complicate their methods and theories to match the

complexity of the systems they study. While logico-scientific modes of understanding are important for establishing causal relationships and predicting outcomes, narrative modes of understanding can capture more nuanced meanings in complex systems of organization. In this way, organizational communication researchers using a narrative approach have a unique opportunity.

When it comes to understanding some of the most socially relevant and complex issues of our time—climate change, globalization, and energy management—many disciplines have fallen short; prediction and causality are nearly impossible to establish in these dynamic and emergent issues. As such, studying large, complex systems of communication such as the Norway Model can be overwhelming. In taking on such a task, the organizational narratologist should not concern themselves with limitations. To make innovative and insightful interpretations regarding organizational narratives, researchers must be deliberate and confident. In utilizing the simplicity of narrative structure to understand complex organization, communication scholars can make both significant interdisciplinary theoretical contributions and applied contributions for organizational practice.

Epilogue

> "We are the first generation with scientific understanding of the new global risks facing humanity…Like no other generation before, we can choose the type of future that we will leave to the next generation. A transition to a safe and prosperous future is possible, but will require the full use of humanity's extraordinary capacity for innovation and creativity."
>
> *Gro Harlem Bruntland, former prime minister of Norway & member of the U.N. secretary general's High-level Panel on Global Sustainability*

The Norwegian success story is a unique oil and gas narrative; although this is certainly a tale of great wealth, power, and transformation, there is no villain. True, examples such as secret KonKraft meetings, fisherman protesting oil platforms in Røst, and the Full City disaster remind us that not all policies are created in the same spirit of transparency, democracy, or coexistence. Yet even among those organizational actors who decry the future of hydrocarbon energy, there is remarkable agreement that oil and gas has been good for Norway. Indeed, this success promotes an even greater sense of responsibility from organizations and actors involved in Norwegian natural resource policy-making, a responsibility to teach the rest of the world about environmentally and socially conscious energy production.

Furthermore, the narratives of Chapters Three and Four imply a latent tension between Norwegian cultural identity and the direction the petroleum sector is headed. These narrators are proud of what they have accomplished in such a short time and believe others can learn from their story. They are determined to prove wrong anyone that says that an oil-producing nation cannot be environmentally responsible. They pride

themselves on promoting moral development practices both in Norway and abroad. They don't want to just share their knowledge with foreign oil companies; they want to promote a Norway Model of clean energy management all over the world.

From this perspective, the Norway Model does not necessarily make sense in terms of narrative coherence and fidelity. Yes, burning fossil fuels is warming the planet, but Norway is a world leader in in progressive climate change policies. Yes, renewable energy technology is important for the future, but most of the state's investments should continue going towards the petroleum sector. Yes, High North petroleum activity could damage rich ecosystems, but comprehensive management plans will mitigate those risks and ensure disaster preparedness. Yes, some people in the North do not want petroleum activity in their backyards, but they also need jobs and tax income from the oil industry to keep their communities thriving.

This is the central issue in current Norwegian resource management debates—and global energy debates in general—about shifting course for the future; industrialized society embraces petroleum for the possibilities it has created, but rejects our dependence on a finite resource that may very well be destroying our planet. In this dissertation, we see such tension through stories about High North development. Without taking the risks of expanding oil and gas activity into the Arctic, the national petroleum sector, the foundation of modern Norwegian society and its marker of global distinction, could become as depleted as the current fossil fuel resources on the continental shelf. But by using the same expertise and regulatory savvy that made this country a global model for responsible resource management, Norway will overcome new challenges and learn for

the future. Calling something a fairytale means there is a happy ending; the key to this story's happy ending is staying the course of fossil fuel development.

Thus, the next chapter of the Norwegian success story remains to be written and this dissertation has argued that narratives about the past, present, and future of the Norway Model will shape the course of natural resource management policies worldwide. Energy management is perhaps the most complex policy issue of our time, and existing models of scientific discovery are being outpaced by the rapid changes to our physical and political global environment. For example, although we know the planet is warming at increasing rates each year, we still cannot accurately predict what those changes mean for the future. The Arctic is symbolic to this shift; without global warming and melting ice, this new frontier for oil and gas discovery would not be possible.

When dealing with such overwhelming uncertainty, especially in decision-making about natural resource production, narratives can be applied toward understanding the nuanced meaning behind organizational systems like the Norway Model. Taken together, "The Ten Oil Commandments" and "A New Chapter for the North" are both synchronic in their storying of one society's success over the last century, but also diachronic in tracing the historical transformation of a culture that has lessons for a changing world. At one time, the Arctic was the last place many people wanted to go. Norway was once positioned at the edge of the world, but now it's an epicenter of global interest. People want to know how they built their fortune, how they created such a healthy and happy society, and how they haven't failed like so many other resource-dependent economies. As perhaps the most successful system of its kind in the world, scholars and policy

makers alike have much to learn from studying these narratives. Overall, conceptualizing this Model's evolution as a narrative offers tangible entry points for understanding how one country's story can change the world.

Appendix A

Interview Schedule

What does *High North* mean?
How do you define the term High North?
Why is the High North important to Norway and other countries?

General perceptions of High North oil and gas development
What are the potential benefits of oil and gas development (OGD)? Who benefits from OGD in the High North?
What are the potential risks of OGD – local, regional, national, international?
What are the short and long term effects of OGD? Please give me examples.

Perceptions of power and representation in decision-making
Who are the different actors (national, local, regional, etc.) in political OGD decision-making? Of these actors, does any have a louder voice than others?
Who should be involved in OGD policy decision-making that is not currently? Who is involved that should not be?
What role do Norwegian voters play in OGD policy decision-making? Give me an example.

Perceptions of government
What are the government's responsibilities to Norwegian citizens, international citizens, and future generations of both populations in OGD decision-making?
Who is the government most accountable to in OGD policy decisions (i.e. constituents, Norwegian citizens, humankind)? How is that accountability manifested? Who is rewarded and punished for their OGD decisions?
How is the government addressing differing views towards OGD? How *should* the government address differing views towards OGD?

Issue Framing
How does your organization frame its views towards Norwegian OGD?
How do opposing organizations frame their views of OGD?
What arguments do you make against these opponents' views?

Media coverage
How do the media portray OGD in Norway?
How do the media represent your party's views on High North OGD? Is this portrayal accurate? What is the most inaccurate portrayal you can recall? The instance where someone got it especially right?
Does this portrayal affect policy-making decisions on the local/regional/national levels?

International implications
What is Norway's role in the worldwide stage and how does OGD affect that role?
What are Norway's responsibilities to the international community?
Where do opportunities and challenges exist in working with other countries in OGD?

National values and identity
What are the core national values of Norwegian people?
What does OGD mean for the future national values of Norway?

Perceptions of the BP oil spill
What do you think about the oil spill in the Gulf of Mexico?
Who should be held accountable for the spill and its long-term consequences?
Do you think this incident has implications for Norwegian resource policies?

Closing
Now that we have covered these issues and you can see what I am about, what else should I be asking?
What piece of information is the most important thing I can have in my report?

Appendix B

Interview Participants & Organizational Affiliations

Name	Title	Affiliation
Ivar Kristiansen	Member of Parliament	Conservative Party
Siri Meling	Member of Parliament	Conservative Party
Janne Sjelmo Nordaas	Member of Parliament	Centre Party
Lars-Andreas Lunde	Parliamentary Advisor	Conservative Party
Line Aune Kristin	Senior Adviser	Ministry of Foreign Affairs
Vegard Kaale	Senior Adviser	Ministry of Foreign Affairs
Jostein Mykletun	Ambassador/Special Adviser & High North Project Manager	Ministry of Foreign Affairs
Helge Eriksen	Mayor of Harstad	Conservative Party
Ole Anders Lindseth	Director General	Ministry of Petroleum and Energy
Peter Nore	Director, Energy Department	NORAD
Frederic Hauge	President	Bellona Foundation
Timothy Moore	Manager	U.S. Embassy
Eivind Sommerseth	Special Adviser	Research Council of Norway
Tom Cato Karlson	City Council Member	Progress Party
Kenneth Svedsen	Member of Parliament	Progress Party
Anna Junggeren	Member of Parliament	Labour Party
Gaute Wahl	President	People's Action
Turrid Thomassen	National Party Leader	Red Party
Kristian Halvorsen	National Party Leader	Socialist Left Party (SV)
	Minister of Knowledge	Ministry of Knowledge
	Former Minister of Finance	Ministry of Finance
Siv Jensen	National Party Leader	Progress Party
Nina Jensen	Conservation Policy Director	World Wildlife Fund Norway
Tore Sandvold	Former Director General	Ministry of Petroleum and Energy

Appendix C

Organizations & Descriptions

Organization	Description
Bellona Foundation	International environmental NGO and think-tank headquartered in Oslo with offices in Brussels, Murmansk, and St. Petersburg
Centre Party (CP)	Centrist political party with fourth-largest parliamentary representation (11 seats); part of Red/Green coalition
Conservative Party (H)	Centrist/conservative-leaning political party with third-largest parliamentary representation (30 seats)
Ethical Council	Government-mandated council for monitoring and enforcing Ethical Guidelines for the Pension Fund investments
KonKraft	Oil and gas industry company coalition promoting High North development and cooperation initiatives for government policy
Labour Party (A)	Centrist political party with largest representation in parliament (64 seats); prime minister and leader of Red/Green coalition
Ministry of Environment (MoE)	Norwegian ministry for coordinating government environmental policy initiatives
Ministry of Finance (MoF)	Norwegian ministry for regulating national taxation system, managing government assets, and preparing fiscal budgets
Ministry of Fisheries and Coastal Affairs (MoFCA)	Norwegian ministry for regulating fisheries, aquaculture industries, seafood safety and fish safety, harbors, sea transport infrastructure, and pollution emergency preparedness
Ministry of Foreign Affairs (MFA)	Norwegian ministry for creating and implementing foreign policy initiatives
Ministry of Petroleum and Energy (MPE)	Norwegian ministry for managing all NCS petroleum operations and regulatory compliance monitoring and enforcement

Norwegian Aid Development (NORAD)	Government organization for coordinating international energy aid and technology transfer initiatives to developing countries
Norwegian Petroleum Directorate (NPD)	Supports the MPE with regulatory compliance monitoring and enforcement; enhances exploration and production efficiency and infrastructure coordination
People's Action Oil-Free Lofoten, Vesteralen, & Senja (PA)	Grassroots organization to protest LoVe petroleum activity
Petoro	Government corporation for managing state activity and interests on the NCS since 2001
Petroleum Safety Authority (PSA)	Independent government organization for establishing and monitoring safety regulations for NCS activity
Phillips Group	Norwegian off-shoot of Oklahoma-based Phillips Petroleum Co.
Progress Party (FrP)	Far right-leaning political party with second-largest parliamentary representation (41 seats)
Red Party (R)	Far left-leaning political party (not currently represented in Storting)
Red/Green Coalition	Ruling parliamentary coalition between Labour, Socialist Left, and Centre parties
Research Council of Norway (RCN)	National funding organization for government policy research initiatives
Socialist Left Party (SV)	Left-leaning political party with fourth-largest parliamentary representation (11 seats); part of Red/Green coalition
Statoil	Formerly state-owned, now private international oil and gas company; government owns 67% of shares
World Wildlife Federation Norway (WWFN)	Norwegian branch of international environmental NGO and conservation think-tank headquartered in Oslo

Appendix D

Archival Data References

Al-Kasim, F. (2006a). *Managing petroleum resources: The "Norwegian Model" in a broad perspective*. Oxford, UK: Oxford Institute for Energy Studies.

Al-Kasim, F. (2006b, January 26). *The relevance of the Norwegian model to developing countries*. Presentation at Norad seminar. Retrieved from http://siteresources.worldbank.org.ezproxy.lib.utexas.edu/EXTNTFPSI/Resources/606764-1150299531473/FaroukAl-Kasim.pdf

Allen, D. (2012, March). Lofoten's troubled waters. *Nature*, 208-304.

Barlindhaug. (2005). *Petroleumsvirkomhet i Barentshavet. Utbyggingsperspektiver og ringvirkninger*. [*Petroleum activity in the Barents Sea. Development perspectives and spin-off effects*]. Tromsø: Barlindhaug, Retrieved from http://www.barlindhaug.no/Data/716/Barentsrapport.pdf

ECON Consulting (2006). *2025: Ringer vannet*. Report for Norwegian Enterprise Confederation (NHO).

Englund, T. (2008). *How to invest $200 billion ethically*. Royal Norwegian Embassy. Retrieved from http://www.norway.org/ARCHIVE/business/businessnews/ethicoil/

Eriksen, T. (2006). *The Norwegian petroleum sector and Government Pension Fund – Global*. Oslo: Norwegian Ministry of Finance. Retrieved from

http://www.regjeringen.no/upload/FIN/Statens%20pensjonsfond/The_Norwegian_Petroleum_Sector_te.pdf

Fife, R. E. (2013, April 22). *Svalbard and the surrounding maritime areas: Background and legal issues frequently asked questions*. Norwegian Ministry of Foreign Affairs. Retrieved from http://www.regjeringen.no/en/dep/ud/selected-topics/civil--rights/spesiell-folkerett/folkerettslige-sporsmal-i-tilknytning-ti.html?id=537481

Folkeaksjonen Oljefritt Lofoten, Vesterålen, og Senja (2011). *The match: A historical review*. Retrieved from http://folkeaksjonen.no/node/5641

Henriksen, J. T., & Sørnes, J. O. (2010). *Ripple effects from petroleum activity: A brief conceptual and empirical investigation in a High North context*. Bodø, Norway: High North Center for Business and Governance.

KonKraft (2009). *Summary of KonKraft report 6: Oil and gas activities in northern Norway*. Retrieved from http://www.konkraft.no/postmann/dbase/bilder/Konkraft%20report%206%20Oil%20and%20gas%20activities%20in%20the%20far%20north%20-%20english%20summary.pdf

Kvendseth, S. S. (1988). *Giant discovery: A history of Ekofisk through the first 20 years*. Oslo: Phillips Petroleum Group Norway.

Lerøen, B. V. (2010). Ten commanding achievements. *Norwegian Continental Shelf: A Journal from the Norwegian Petroleum Directorate, 2*, 13-15.

Norwegian Ministry of the Environment (2002, June 28). *New act protects the wilderness of Svalbard*. Retrieved from http://www.regjeringen.no/nb/dokumentarkiv/Regjeringen-Bondevik-II/md/Nyheter-og-pressemeldinger/2002/new_act_protects_the_wilderness.html?id=247545

Norwegian Ministry of Environment. (2006). *Integrated management of the marine environment of the Barents Sea and the sea areas off the Lofoten Islands*. Meld. St. 8 (2005-2006) Report to the Storting (white paper).

Norwegian Ministry of Environment. (2011). *First update of the Integrated Management Plan for the marine environment of the Barents Sea-Lofoten Area*. Meld. St. 10 (2010-2011) Report to the Storting (white paper). Retrieved from http://www.regjeringen.no/pages/37878053/PDFS/STM201020110010000EN_PDFS.pdf

Norwegian Ministry of Finance. (2012). *The management of the Government Pension Fund in 2011*. Meld. St. 17 (2011-2012) Report to the Storting (white paper). Retrieved from http://www.regjeringen.no/pages/37868600/PDFS/STM201120120017000EN_PDFS.pdf

Norwegian Ministry of Foreign Affairs. (2006). *Norway's oil production through 35 years*. Retrieved from http://www.norway.org/ARCHIVE/business/businessnews/oilproduction/

Norwegian Ministry of Foreign Affairs. (2006). *The Norwegian Government's High North Strategy*. Oslo: Grøset Trykk As.

Norwegian Ministry of Foreign Affairs. (2008). *National interest: Foreign policy for a globalised world and the case of Norway*. Report for the Refleks Project. Oslo: Norwegian Ministry of Foreign Affairs.

Norwegian Ministry of Foreign Affairs. (2009). *New building blocks in the North: The next step in the Government's High North Strategy*. Oslo: Norwegian Ministry of Foreign Affairs.

Norwegian Ministry of Foreign Affairs. (2009). *Report No. 10 (2008-2009) to the Storting, Corporate social responsibility in a global economy*. Oslo: Norwegian Ministry of Foreign Affairs.

Norwegian Ministry of Petroleum & Energy. (2006). *Norwegian resource management*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/Energy-in-Norway/Norwegian-resource-management.html?id=440678

Norwegian Ministry of Petroleum & Energy. (2010a). *Norway's oil history in 5 minutes*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/Oil-and-Gas/norways-oil-history-in-5-minutes.html?id=440538

Norwegian Ministry of Petroleum & Energy. (2010b). *Petoro AS*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/state-participation-in-the-petroleum-sec/petoro-as-2.html?id=445747

Norwegian Ministry of Petroleum & Energy. (2011). *An industry for the future: Norway's petroleum activities.* Meld. St. 28 (2010-2011) Report to the Storting

(white paper). Retrieved from http://www.regjeringen.no/upload/OED/Petroleumsmeldingen_2011/Oversettelse/2011-06_White-paper-on-petro-activities.pdf

Norwegian Ministry of Petroleum & Energy. (2012, November 7). *The State's direct financial interest (SDFI)*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/state-participation-in-the-petroleum-sec/the-states-direct-financial-interest-sdf.html?id=445748

Norwegian Ministry of Petroleum and Energy & Norwegian Petroleum Directorate. (2012). *Facts 2012: The Norwegian petroleum sector*. Retrieved from http://www.npd.no/Global/Engelsk/3-Publications/Facts/Facts2012/Facts_2012_web.pdf

Norwegian Office of the Prime Minister (2006). *The Soria Moria Declaration on International Policy Report*. Retrieved from http://www.regjeringen.no/Soria Moria Erklæringen

Norwegian Petroleum Directorate. (2003). *Two halves make a whole*. Retrieved from http://www.ptil.no/getfile.php/z%20Konvertert/Health,%20safety%20and%20environment/HSE%20news/Dokumenter/engelskinnstikkomdelingenavod.pdf

Norwegian Petroleum Directorate. (2009, May 15). *History*. Retrieved from http://www.npd.no/en/About-us/Organisation/History/

Norwegian Petroleum Directorate. (2010, April 16). *Petroleum resources off Lofoten, Vesterålen, and Senja*. Retrieved from

http://www.npd.no/en/news/News/2010/Petroleum-resources-off-Lofoten-Vesteralen-and-Senja/

Norwegian Petroleum Directorate. (2011, June 6). *An industry for the future – report to the Storting on Norway's petroleum policy*. Retrieved from http://www.regjeringen.no/en/dep/oed/press-center/press-releases/2011/an-industry-for-the-future--report-to-th.html?id=649902

Statoil (2009). *Annual report 2009*. Retrieved from http://www.statoil.com/AnnualReport2009/en/Pages/default.aspx

Statoil (2012). *Statoil: Forty years of amazement*. Retrieved from http://www.statoil.com/en/about/history/pages/statoil40years.aspx

Støre, J. G. (2012, September 21). *Norway's interests in the High North*. Norwegian Ministry of Foreign Affairs. Oslo. Retrieved from http://www.regjeringen.no/en/dep/ud/whats-new/Speeches-and-articles/speeches_foreign/2012/interests_north.html?id=710885

Strand, S. (2002, May 7). "Co-existence fisheries-petroleum, the Norwegian experience, and challenges in the Barents Sea." Presented at the "Northern Cooperation: Common Challenges" conference sponsored by the Ministry of Fisheries. Retrieved from http://www.regjeringen.no/en/archive/Bondeviks-2nd-Government/fid/Taler-og-artikler-arkivert-individuelt/2002/co-existence_fisheries-petroleum.html?id=265850

Tønne, T. (1983). Energy policy: A Norwegian perspective. *Northwestern Journal of International Law & Business, 5*, 722-742.

World Wildlife Federation Norway. (2004). *The Barents Sea Ecoregion: A biodiversity assessment*. Retrieved from http://www.panda.org/what_we_do/where_we_work/arctic/what_we_do/marine/barent/publications/?12202/The-Barents-SeaEcoregion-A-biodiversity-assessment

Appendix E

Chronological Listing of State Petroleum Policies

Date	Policy
1814	Norway declared itself independent from Denmark and ratified a national constitution
1905	Sweden approves Storting-approved separation with Norway and independent constitutional monarchy established
1906	Storting approves Original Concession Act (i.e., "Panic Act")
1917	Storting approves Concession Act and Water Regulations Act
1925	Storting approves Act of 17 July 1925 No. 11 (i.e., "The Svalbard Act") to enforce Norwegian law and sovereignty over Svalbard
May 1963	Royal Decree Relating to the Sovereignty of Norway Over the Seabed and Subsoil Outside the Norwegian Coast (i.e., "Only the King" decree)
June 1963	Storting approves Act of 21 June 1963 No. 12, Relating to Exploration for and Exploitation of Submarine Natural Resources (i.e., "Submarine Resources Act")
March 1965	Maritime border agreements reached with Denmark and Great Britain
April 1965	Ministry of Industry advertises first round of NCS licensing applications
August 1965	Ministry of Industry announces NCS licensing concessions
June 1966	Storting approves Act of 17 June 1966 No. 12, Relating to National Insurance ("The National Insurance Act")
June 1970	Storting publishes report estimating Ekofisk tax income value at 100-500 NOK (16-85 USD) in tax income per year for the next 20-30 years
June 1971	Follow-up Storting report estimating Ekofisk tax income value at 2.5-3.5 billion NOK (45-65 million USD) per year for the next 20-30 years
June 1971	Storting approves *White Paper No. 76 (1970-1971), Exploration for and exploitation of subsea natural resources on the Norwegian Continental Shelf, etc.* (i.e., "The Ten Oil Commandments")

June 1972	Storting establishes Norwegian State Oil Company (i.e., Statoil) and Norwegian Petroleum Directorate by unanimous vote
December 1972	Follow-up Royal Decree of December 8, 1972, Relating to Exploration for and Exploitation of Petroleum in the Seabed and Substrata of the Norwegian Continental Shelf (i.e., "Only the King" decree)
June 1973	Storting approves *White Paper No. 25 (1973-1974), Petroleum activity and its position to society* as a follow-up to the Ten Oil Commandments
June 1975	Act of 13 June 1975 No. 35, Relating to the Taxation of Subsea Petroleum Deposits (i.e., "The Petroleum Taxation Act")
1978	Storting creates Ministry of Petroleum and Energy
1979	Storting transfers environmental and worker safety regulation responsibilities to Ministry of Local Government and Labour
1979	MPE enacts agreements between Statoil and foreign NCS operators to encourage technology transfer during fourth licensing round
March 1985	Storting approves Act of March 1985 No. 11, Relating to Petroleum Activities to replace Submarine Resources Act
June 1985	Storting approves *White Paper No. 33 (1984-1985) Concerning the effect of the reorganisation of the State's participation in the petroleum industry* and splits state NCS activity investments between Statoil and the newly created State's Direct Financial Interest
June 1990	Storting approves Act of 22 June 1990 No. 36, Relating to the Government Petroleum Fund (i.e., The Government Petroleum Fund Act") and establishes the State Petroleum Fund (i.e., "The Fund")
December 1990	Storting approves Act of 21 December 1990 No. 72, Relating to Tax Discharge of CO_2 in the Petroleum Activities on the Continental Shelf and establishes a carbon tax on oil and gas activity
November 1996	Storting approves Act of 29 November 1996 No. 35, Relating to Petroleum Activities (i.e., "The Petroleum Act") to replace 1985 update of Submarine Resources Act
January 2001	Bondevik government places moratorium on Barents Sea exploration
March 2001	Storting approves *White Paper No. 29 (2000-2001), Guidelines for the economic policy* and establishes handlingsregelen (i.e., "the four-percent rule") for managing The Fund
June 2001	Storting approves privatization of Statoil and establishes Petoro

June 2001	Storting approves Act of 15 June 2001 No. 79, Relating to the Protection of the Environment in Svalbard
March 2002	Storting approves *White Paper No. 12 (2001-2002), Protecting the riches of the sea* to formalize integrated management plan strategy
June 2003	Storting approves *White Paper No. 17 (2002-2003), Relating to State Supervision* and establishes Petroleum Safety Authority
January 2004	WWFN publishes report on environmental sensitivity of LoVe and Barents Sea ecosystems, condemning petroleum development
November 2004	Royal Decree of 19 November 2004 establishes *Ethical Guidelines for the Petroleum Fund* international investment strategy
October 2005	Ministry of Local Government and Regional Development commissions *Barlindhaug Report* on High North ripple effects
October 2005	Stoltenberg government announces Soria Moria Declaration for High North strategy
November 2005	Ministry of Environment publishes *Barents Sea Management Plan*
May 2006	ECON consulting publishes *2025 Rings in the Water*, projecting that the High North petroleum development would create 10,000 new jobs in Norway by 2025
June 2007	Storting approves *White Paper No. 34 (2006-2007), Norwegian climate policy* and sets goal of exceeding Kyoto Protocol by 10%
February 2011	Storting approves Treaty between the Kingdom of Norway and the Russian Federation concerning Maritime Delimitation and Cooperation
June 2011	MPE presents *An industry for the future: Norway's petroleum activities* to Storting
January 2013	Stoltenberg announces delay in LoVe decisions until after September national elections

Appendix F

Sample Theoretical Memo

What is unique about the Norwegian approach to foreign policy and resource extraction?

- The brand of policy-making where EVERYBODY WINS makes it more attractive to industry (for future and sustained investment, despite high regulation and taxation) and foreign governments (to emulate and work with in decision-making).
- Consensus and dialogue as rational, pragmatic forms of negotiation in decision-making in political/policy-making organizations.
- Open, transparent, invitational dialogue is motivated by self-interest (as put by JM) and has allowed them to have a leading seat at the table in this discussion from the beginning. By offering a predictable and credible approach, they are also now being modeled by other countries such as China, therefore influencing the direction of the issue and policy for the long term with potential conflicts.
- JM stressed that Norwegian foreign policy was based on HIGH NORTH LOW TENSION. This means anticipating an avoiding conflict with Russia.
- They have also accomplished social success in terms of equality between the sexes, "eradicating poverty" (JM), relatively low crime, etc. while still maintaining significant wealth, which other mid-size/small nations rich in natural resources have not accomplished, giving support towards adopting/adapting their communication strategy/management practice in other countries building a reliable framework.

What are the specific components of this policy-model?

- Consistency: practice at home what you preach abroad
- Consensus: a cultural value based on Norwegian history
- Neutrality: separating energy and politics on the international stage (e.g., reliable source of energy for Europe and companies, international peace-brokering)
- Innovation: best technology, research, trying to build up Northern education
- Rational: most informed policy because based on facts, not ideology, and also invites everyone to have a seat at the table
- Networks: relationships with industry, NGOs, local communities, and other actors
- Resources: they have the money to back it up, thus have proven that this strategy works in shaping oil and gas development
- Clarity: clearly articulated goals, outcomes, and evaluations
- Foresight: designed for long-term engagement
- Culturally valuable: democracy, humanitarianism, environmentalism

What do I need to do to build this model?

- Locate the beginning, current, and future of Norwegian model's history
- Locate potential critiques of its application to other country's government systems
- Build rationale for why it benefits industry, government, and people in general

References

(November 26, 1977). "The Dutch Disease" *The Economist*, pp. 82-83.

(2009, August 7). Mapping of Lofoten completed. *Barents Observer*. Retrieved from http://barentsobserver.com/en/node/18073

Al-Kasim, F. (2006a). *Managing petroleum resources: The "Norwegian Model" in a broad perspective*. Oxford, UK: Oxford Institute for Energy Studies.

Al-Kasim, F. (2006b, January 26). *The relevance of the Norwegian model to developing countries*. Presentation at Norad seminar. Retrieved from http://siteresources.worldbank.org.ezproxy.lib.utexas.edu/EXTNTFPSI/Resources/606764-1150299531473/FaroukAl-Kasim.pdf

Allen, D. (2012, March). Lofoten's troubled waters. *Nature*, 208-304.

Amos, H. (2011, July 2011). Arctic treaty with Norway opens fields. *The Moscow Times*. Retrieved from http://www.themoscowtimes.com/business/article/arctic-treaty-with-norway-opens-fields/440178.html

Aukrust, V. G., & Snow, C. E. (1998). Narratives and explanations during mealtime conversations in Norway and the U.S. *Language in Society, 27*, 221-246.

Austvik, O. G. (2012). Landlord and entrepreneur: The shifting roles of the state in Norwegian oil and gas policy. *Governance, 25*, 315-334.

Auty, R. M. (1993). *Sustaining development in mineral economies: The resource curse thesis*. London: Routledge.

Barlindhaug. (2005). *Petroleumsvirkomhet i Barentshavet. Utbyggingsperspektiver og ringvirkninger*. [*Petroleum activity in the Barents Sea. Development perspectives*

and spin-off effects]. Tromsø: Barlindhaug, Retrieved from http://www.barlindhaug.no/Data/716/Barentsrapport.pdf

Barthes, R. (1996). Introduction to the structural analysis of narratives. In S. Onega & J. A. G. Landa (Eds.), *Narratology: An introduction* (pp. 45-60). New York: Longman.

Boje, D. M. (1991). The storytelling organization: A study of story performance in an office-supply firm. *Administrative Science Quarterly, 36*, 106-126.

Boje, D. M. (1995). Stories of storytelling organization: A postmodern analysis of Disney as "Tamara-land." *Academy of Management Journal, 38*, 997-1035.

Boje, D. M. (2001). *Narrative methods of organizational and communication research*. Thousand Oaks, CA: Sage Publications.

Borins, B. F. (2011). Narratological approach to public management innovation. *Journal of Public Administration Research and Theory, 22*, 165-189.

Bowen, G. A. (2006). Grounded theory and sensitizing concepts. *International Journal of Qualitative Methods, 5*, 1-9. Retrieved from http://www.ualberta.ca/~iiqm/backissues/5_3/PDF/bowen.pdf

Boyce, M. E. (1996). Organizational story and storytelling: A critical review. *Journal of Organizational Change Management, 9*, 5-26.

Blumer, H. (1954). What is wrong with social theory? *American Sociological Review, 18*, 3-10.

Browning, L. D., & Boudes, T. (2005). The use of narrative theory to understand and respond to complexity: A comparative analysis of the Cynefin and Weickian models. *Emergence: Complexity & Organizations, 7*, 32-39.

Browning, L. D., Greene, R., Sutcliffe, K., Sitkin, S., & Obstfeld, D. (2009). Constitutive complexity: Military entrepreneurs and the synthetic character of communication flows. In L. Putnam & A. Nicotera (Eds.), *Building theories of organization: The constitutive role of communication* (pp. 89-116). Mahwah, NJ: Lawrence Erlbaum.

Browning, L. D., & Morris, G. H. (2012). *Stories of life in the workplace: An open architecture for organizational narratology*. New York: Routledge.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Bruner, J. (1996). The narrative construal of reality. In J. Bruner (Ed.), *The culture of education*. Cambridge, MA: Harvard University Press.

Campbell, D. T. (1975) "Degrees of freedom" and the case study. *Comparative Political Studies, 8*, 178-193

Carr, D. (2008). Narrative explanation and its malcontents. *History and Theory, 47*, 19-30.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Los Angeles, CA: Sage.

Cheney, G., Christensen, L., Zorn, T. & Ganesh, S. (2011). *Organizational communication in an age of globalization: Issues, reflections, practices*. Prospect Heights, IL: Waveland Press.

Corbin, J. & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology, 13*, 3-21.

Corden, W. M., & Neary, J. P. (1982). Booming sector and de-industrialisation in a small open economy. *Economic Journal, 92*, 825-848.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice, 39*, 124–134.

Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing, 31*, 1476-1484.

Czarniawska, B. (1998). *A narrative approach to organization studies*. Thousand Oaks, CA: Sage Publications.

Czarniawska, B. & Wolff, R. (1998). Constructing new identities in established organization fields. *International Studies of Management & Organization, 28*, 32-56.

Czarniawska, B. (2011). Narrating organization studies. *Narrative Inquiry, 21*, 337-344.

Dale, B. (2011). *Securing a contingent future: How threats, risks and identity matter in the debate over petroleum development in Lofoten, Norway*. (Unpublished doctoral dissertation.) University of Tromsø, Norway.

Denzin, N. K., & Lincoln, Y. S. (1998). *Collecting and interpreting qualitative material*. Thousand Oaks, CA: Sage Publications.

Douglas, M. (1986). *How institutions think. London*: Routledge & Kegan Paul.

ECON Consulting (2006). *2025: Ringer vannet*. Report for Norwegian Enterprise Confederation (NHO).

Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review, 14*, 532-550

Emmerson, C. (2010). *The future history of the Arctic*. New York: PublicAffairs.

Englund, T. (2008). *How to invest $200 billion ethically*. Royal Norwegian Embassy. Retrieved from http://www.norway.org/ARCHIVE/business/businessnews/ethicoil/

Eriksen, T. (2006). *The Norwegian petroleum sector and Government Pension Fund – Global*. Oslo: Norwegian Ministry of Finance. Retrieved from http://www.regjeringen.no/upload/FIN/Statens%20pensjonsfond/The_Norwegian_Petroleum_Sector_te.pdf

Fife, R. E. (2013, April 22). *Svalbard and the surrounding maritime areas: Background and legal issues frequently asked questions*. Norwegian Ministry of Foreign Affairs. Retrieved from http://www.regjeringen.no/en/dep/ud/selected-topics/civil--rights/spesiell-folkerett/folkerettslige-sporsmal-i-tilknytning-ti.html?id=537481

Fisher, W. R. (1984). Narration as a human communication paradigm: The case of public moral argument. *Communication Monographs, 51*, 1-22.

Fisher, W. R. (1987). *Human communication as narration: Toward a philosophy of reason, value and action*. Columbia, SC: University of South Carolina Press.

Fisher, W. R. (1989). Clarifying the narrative paradigm. *Communication Monographs, 56*, 55-58.

Folkeaksjonen Oljefritt Lofoten, Vesterålen, og Senja (2011). *The match: A historical review*. Retrieved from http://folkeaksjonen.no/node/5641

Gabriel, Y. (1995). The unmanaged organization: Stories, fantasies and subjectivity. *Organization Studies, 16*, 477-502.

Gabriel, Y. (2004). Narratives, stories, and texts. In D. Grant, C. Hardy, C. Oswick, & L. Putnam (Eds.), *The Sage handbook of organizational discourse* (pp. 61-78). London: Sage Publications.

Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.

Gibbs, R. (2010, April 27). Russia and Norway reach accord on Barents Sea. *The New York Time*s. Retrieved from http://www.nytimes.com/2010/04/28/world/europe/28norway.html?scp=1&sq=barents+sea&st=nyt

Glaser, B. (1978). *Theoretical sensitivity*. Mill Valley, CA: The Sociology Press.

Glaser, B. (1992). *Emergence vs. forcing: Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.

Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine.

Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Newbury Park, CA: Sage Publications.

Gubrium, J. F., & Holstein, J. A. (1999). At the border of narrative and ethnography. *Journal of Contemporary Ethnography, 28*, 561-573.

Harsem, O., Eide, A., & Heen, K. (2011). Factors influencing future oil and gas prospects in the Arctic. *Energy Policy, 39*, 8037-8045.

Hatakenaka, S., Westnes, P., Gjelvick, M. & Lester, R. K. (2006). The regional dynamics of innovation: A comparative case study of oil and gas industry development in Stavanger and Aberdeen. *Energy Innovation Working Paper Series*. Cambridge, MA: Industrial Performance Center, Massachusetts Institute of Technology.

Henriksen, J. T., & Sørnes, J. O. (2010). *Ripple effects from petroleum activity: A brief conceptual and empirical investigation in a High North context*. Bodø, Norway: High North Center for Business and Governance.

Hoshmand, L. T. (2005). Narratology, cultural psychology, and counseling research. *Journal of Counseling Psychology, 52*, 178-186.

Ihlen, Ø. (2009). The oxymoron of "sustainable oil production": The case of the Norwegian oil industry. *Business Strategy and the Environment, 18*, 53–63.

Ihlen, Ø., & Berntzen, Ø. (2007). When lobbying backfires: Balancing lobby efforts with insights from stakeholder theory. *Journal of Communication Management, 11*, 235–246

Jackson, R. L., Drummond, D. K., & Samara, C. (2007). What is qualitative research? *Qualitative Research Reports in Communication, 8*, 21-28.

Jones, M. D., & McBeth, M. K. (2010). A narrative policy framework: Clear enough to be wrong? *Policy Studies Journal, 38*, 329-358.

KonKraft (2009). *Summary of KonKraft report 6: Oil and gas activities in northern Norway*. Retrieved from http://www.konkraft.no/postmann/dbase/bilder/Konkraft%20report%206%20Oil%20and%20gas%20activities%20in%20the%20far%20north%20-%20english%20summary.pdf

Kristoffersen, B., & Young, S. (2010). Geographies of security and statehood in Norway's "Battle of the North." *Geoforum, 41*, 577-584.

Krugman, P. (1987). The narrowing band, the Dutch disease, and the competitive consequences of Mrs. Thatcher. *Journal of Development Economics, 27*, 41-55.

LaRossa, R. (2005). Grounded theory methods and qualitative family research. Journal of *Marriage and Family, 67*, 837-857.

Lerøen, B. V. (2010). Ten commanding achievements. Norwegian Continental Shelf: A *Journal from the Norwegian Petroleum Directorate, 2*, 13-15.

Lincoln, Y. S. & Guba, E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.

Lindholt, L. & Glomsrød, S. (2012). The Arctic: No big bonanza for the global petroleum industry. *Energy Economics*, *34*, 1465-1474.

Lindlof, T. R. & Taylor, B. C. (2010). *Qualitative communication research methods*. Thousand Oaks, CA: Sage.

Lyotard, J. (1984). *The postmodern condition: A report on knowledge*. (G. Bennington & Massouri, trans.). Minneapolis: University of Minnesota Press).

O. A. Lindseth, personal communication, July 10, 2010

Maxwell, G. (2004). Using qualitative methods for causal explanation. *Field Methods, 16*, 243-264.

McAdams, D. (1993). *The stories we live by: Personal myths and the making of the self.* New York: Morrow.

McAdams, D. (2006). *The redemptive self: Stories Americans live by*. New York: Oxford University Press.

Mills, J. (2009). Redefining qualitative methods: Believability in the Fifth Movement. *International Journal of Qualitative Methods, 8*, 1-14.

Moskwa, W. & Fouche, G. (2010, 29 July). "Factbox: Norway's oil vs. environment battles." *Reuters*. Retreived from http://www.reuters.com/article/2010/07/29/us-norway-drilling-factbox-idUSTRE66S28F20100729

National Snow and Ice Data Center (n.d.) *What is the Arctic?* Retrieved from http://nsidc.org/cryosphere/arctic-meteorology/images/arctic_map.gif

Nilsen, H. R. (2010). Overlapping consensus versus discourse in climate change policy: The case of Norway's sovereign wealth fund. *Environmental Science & Policy, 13*, 123-130.

Norwegian Ministry of the Environment (2002, June 28). *New act protects the wilderness of Svalbard*. Retrieved from http://www.regjeringen.no/nb/dokumentarkiv/Regjeringen-Bondevik-II/md/Nyheter-og-pressemeldinger/2002/new_act_protects_the_wilderness.html?id=247545

Norwegian Ministry of Environment. (2006). *Integrated management of the marine environment of the Barents Sea and the sea areas off the Lofoten Islands*. Meld. St. 8 (2005-2006) Report to the Storting (white paper).

Norwegian Ministry of the Environment (2011). *Sea ice extent in 2010 compared to 1979-2000*. Retrieved from http://www.regjeringen.no/nb/dep/md/dok/regpubl/stmeld/2010-2011/meld-st-10-20102011/3.html?id=682057

Norwegian Ministry of Environment. (2011). First update of the *Integrated Management Plan for the marine environment of the Barents Sea-Lofoten Area*. Meld. St. 10 (2010-2011) Report to the Storting (white paper). Retrieved from http://www.regjeringen.no/pages/37878053/PDFS/STM201020110010000EN_PDFS.pdf

Norwegian Ministry of Finance. (2012). *The management of the Government Pension Fund in 2011.* Meld. St. 17 (2011-2012) Report to the Storting (white paper). Retrieved from http://www.regjeringen.no/pages/37868600/PDFS/STM201120120017000EN_PDFS.pdf

Norwegian Ministry of Foreign Affairs. (2006). *Norway's oil production through 35 years*. Retrieved from http://www.norway.org/ARCHIVE/business/businessnews/oilproduction/

Norwegian Ministry of Foreign Affairs. (2006). *The Norwegian Government's High North Strategy*. Oslo: Grøset Trykk As.

Norwegian Ministry of Foreign Affairs. (2008). *National interest: Foreign policy for a globalised world and the case of Norway*. Report for the Refleks Project. Oslo: Norwegian Ministry of Foreign Affairs.

Norwegian Ministry of Foreign Affairs. (2009). *New building blocks in the North: The next step in the Government's High North Strategy*. Oslo: Grøset Trykk As.

Norwegian Ministry of Foreign Affairs. (2009). *Report No. 10 (2008-2009) to the Storting, Corporate social responsibility in a global economy*. Oslo: Norwegian Ministry of Foreign Affairs.

Norwegian Ministry of Petroleum & Energy. (2006). *Norwegian resource management*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/Energy-in-Norway/Norwegian-resource-management.html?id=440678

Norwegian Ministry of Petroleum & Energy. (2010a). *Norway's oil history in 5 minutes*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/Oil-and-Gas/norways-oil-history-in-5-minutes.html?id=440538

Norwegian Ministry of Petroleum & Energy. (2010b). *Petoro AS*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/state-participation-in-the-petroleum-sec/petoro-as-2.html?id=445747

Norwegian Ministry of Petroleum & Energy. (2011). *An industry for the future: Norway's petroleum activities.* Meld. St. 28 (2010-2011) Report to the Storting (white paper). Retrieved from http://www.regjeringen.no/upload/OED/Petroleumsmeldingen_2011/Oversettelse/2011-06_White-paper-on-petro-activities.pdf

Norwegian Ministry of Petroleum & Energy. (2012, November 7). *The State's direct financial interest (SDFI)*. Retrieved from http://www.regjeringen.no/en/dep/oed/Subject/state-participation-in-the-petroleum-sec/the-states-direct-financial-interest-sdf.html?id=445748

Norwegian Ministry of Petroleum and Energy & Norwegian Petroleum Directorate. (2012). *Facts 2012: The Norwegian petroleum sector*. Retrieved from http://www.npd.no/Global/Engelsk/3-Publications/Facts/Facts2012/Facts_2012_web.pdf

Norwegian Office of the Prime Minister (2006). *The Soria Moria Declaration on international policy report*. Retrieved from http://www.regjeringen.no/Soria Moria Erklæringen

Norwegian Petroleum Directorate. (2003). *Two halves make a whole*. Retrieved from http://www.ptil.no/getfile.php/z%20Konvertert/Health,%20safety%20and%20environment/HSE%20news/Dokumenter/engelskinnstikkomdelingenavod.pdf

Norwegian Petroleum Directorate. (2009, May 15). *History*. Retrieved from http://www.npd.no/en/About-us/Organisation/History/

Norwegian Petroleum Directorate. (2010, April 16). *Petroleum resources off Lofoten, Vesterålen, and Senja*. Retrieved from http://www.npd.no/en/news/News/2010/Petroleum-resources-off-Lofoten-Vesteralen-and-Senja/

Norwegian Petroleum Directorate. (2011, June 6). *An industry for the future – report to the Storting on Norway's petroleum policy*. Retrieved from

http://www.regjeringen.no/en/dep/oed/press-center/press-releases/2011/an-industry-for-the-future--report-to-th.html?id=649902

Parry, K. W. (1998). Grounded theory and social processes: A new direction for leadership research. *Leadership Quarterly, 9*, 85-105.

Patton, M. Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.

Polkinghorne, D. E. (1988). *Narrative knowing and the human sciences*. Albany, NY: State University of New York Press.

Polkinghorne, D. E. (1991). Narrative and self-concept. *Journal of Narrative and Life History, 1*, 135-153.

Polkinghorne, D. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology, 52*, 137-145.

Polster, E. (1987). *Every person's life is worth a novel*. Highland, NY: The Gestalt Journal Press.

Putnam, L.L. & Fairhurst, G. T. (2001). Discourse analysis in organizations: Issues and concerns. In F. M. Jablin and L. Putnam (Eds.), *The new handbook of organizational communication*. Thousand Oaks, CA: Sage.

Reiche, D. (2010). Sovereign wealth funds as a new instrument of climate change protection policy? A case study of Norway as a pioneer of ethical guidelines. *Energy, 35*, 3569-3577.

Ricœur, P. (1984). *Time and narrative, Volume one*. (K. McLaughlin & D. Pellauer, Trans.). Chicago: University of Chicago Press.

Ricœur, P. (1985). *Time and narrative, Volume two*. (K. McLaughlin & D. Pellauer, Trans.). Chicago: University of Chicago Press.

Ricœur, P. (2004). *Memory, history, forgetting*. (K. Blamey & D. Pellauer, Trans.). Chicago: University of Chicago Press.

Roe, E. (1994). *Narrative policy analysis: Theory and practice*. Durham, NC: Duke University Press.

Sæther, B., Isaksen, A., & Karlsen, A. (2011). Innovation by co-evolution in natural resource industries: The Norwegian experience. *Geoforum, 42*, 373-381.

Smil, V. (2005). *Energy at the crossroads: Global perspectives and uncertainties*. Cambridge, MA: The MIT Press.

Stake, R. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Statoil (2009). *Annual report 2009*. Retrieved from http://www.statoil.com/AnnualReport2009/en/Pages/default.aspx

Statoil (2012a). *Statoil: Forty years of amazement*. Retrieved from http://www.statoil.com/en/about/history/pages/statoil40years.aspx

Statoil (2012b). *Snovit*. Statoil. Retrieved from http://www.statoil.com/EN/OUROPERATIONS/EXPLORATIONPROD/NCS/SNOEHVIT/Pages/default.aspx

Støre, J. G. (2012, September 21). *Norway's interests in the High North*. Norwegian Ministry of Foreign Affairs. Oslo. Retrieved from http://www.regjeringen.no/en/dep/ud/whats-new/Speeches-and-articles/speeches_foreign/2012/interests_north.html?id=710885

Strand, S. (2002, May 7). "Co-existence fisheries-petroleum, the Norwegian experience, and challenges in the Barents Sea." Presented at the "Northern Cooperation: Common Challenges" conference sponsored by the Ministry of Fisheries. Retrieved from http://www.regjeringen.no/en/archive/Bondeviks-2nd-Government/fid/Taler-og-artikler-arkivert-individuelt/2002/co-existence_fisheries-petroleum.html?id=265850

Strauss, A., & Corbin, J. (1990, 1998). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.

Suddaby, R. (2006). What grounded theory is not. *Academy of Management Journal, 49*, 633-642.

Taylor, J. R., & Van Every, E. (2000). *The emergent organization: Communication at its site and surface*. Mahwah, NJ: Lawrence Erlbaum Associates.

Thurber, M. C., Hults, D. R., & Heller, P. R. P. (2011). Exporting the "Norwegian Model": The effect of administrative design on oil sector performance. *Energy Policy, 39*, 5366-5378.

Thurber, M. C., & Istad, B. T. (2010). *Norway's evolving champion: Statoil and the politics of state enterprise*. Program on Energy and Sustainable Development Working Paper 92. Retrieved from http://pesd.stanford.edu/publications/norways_evolving_champion_statoil_and_the_politics_of_state_enterprise

Tønne, T. (1983). Energy policy: A Norwegian perspective. *Northwestern Journal of International Law & Business, 5*, 722-742.

Torvik, R. (2001). Learning by doing and the Dutch disease. *European Economic Review, 45*, 285-306.

U.S. Central Intelligence Agency (2012). *Arctic region (political) 2012*. Retrieved from https://www.cia.gov/library/publications/cia-maps-publications/index.html

U.S. Central Intelligence Agency (2013). *Svalbard (Norway) 2013*. Retrieved from https://www.cia.gov/library/publications/cia-maps-publications/index.html

U.S. Department of State (n.d.). *Norway*. Retrieved from http://www.state.gov/p/eur/ci/no/

U.S. Energy Information Administration (2012, 20 Jan.). *Arctic oil and natural gas resources*. Retrieved from http://www.eia.gov/todayinenergy/detail.cfm?id=4650

Vaaland, T.I., & Heide, M. (2005). Corporate social responsiveness: Exploring the dynamics of "bad episodes." *European Management Journal, 23,* 495-506.

Vaaland, T.I., & Heide, M. (2008). Managing corporate social responsibility: Lessons from the oil industry. *Corporate Communications: An International Journal, 13*, 212-225.

Weick, K. E. (1979). *The social psychology of organizing* (2nd ed.). McGraw Hill.

Weick, K. E., & Browning, L. D. (1986). Argument and narration in organizational communication. *Journal of Management, 12*, 243-259.

Weick, K. E., & Sutcliffe, K. (2001). *Managing the unexpected: Assuring high performance in an age of complexity*. San Francisco, CA: Jossey Bass.

Weick, K. E., & Sutcliffe, K. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty*. San Francisco, CA: Jossey Bass.

Weick, K. E., Sutcliffe, K. & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organizational Science, 16*, 409-421.

Wolcott, H. F. (2005). The art of fieldwork (2nd ed.). Walnut Creek, CA: Alta Mira.

Woodside, A. G. & Wilson, E. J. (2003). Case study research methods and theory building. *Journal of Business & Industrial Marketing, 18*, 493-508.

World Wildlife Federation Norway. (2004). *The Barents Sea Ecoregion: A biodiversity assessment*. Retrieved from http://www.panda.org/what_we_do/where_we_work/arctic/what_we_do/marine/barent/publications/?12202/The-Barents-SeaEcoregion-A-biodiversity-assessment

Yergin, D. (1991). *The prize: The epic quest for oil, money, and power*. New York: Free Press.

Yin, R. K. (1994). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

Yin, R. K. (1999). Enhancing the quality of case studies in health services research. *Heath Services Research, 34*, 1209-1224.